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Review of Some of our later Remedies, viz. Coca Erythroxylon, Damiana, Jamaica Dogwood; Gynephobia (fear of woman); Electro-Therapeutics, Electro-Cautery, Electricity in Cases of Suspended Animation, etc.

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COCA ERYTHROXYLON. If this valuable remedy afforded no other virtues than those immediately manifested in neuro-asthenia, hysteria, opium habit, dypsomania, alcoholism, etc., these alone would place it high in the ranks of therapy. This remedy contains a multiple of virtues, and indeed probably more than any one of late discovery, as some of our best authorities and experimenters have demonstrated. In my opinion Coca is the most immediate, safe, and reliable nerve tonic known, acting rapidly as a diffusive stimulant, leaving no unpleasant results. So general is its action on different nerve centres, that in a few minutes after administration, there ensues a mental quietude and satisfaction, with easy respiration and happy digestion, at the same time producing a decided and rapid effect on the sacral plexus, thus affording the quickest relief to hysteria and its allied troubles, and adding tone and strength to the genito-urinary organs, offering to the profession a new and immediate aphrodisiac. Finally manifesting wonderful facilities in relieving general malaise, tire, weariness and hunger. Hence its universal application as a restorer and as an arrester of destructive metamorphosis.

Coca has long been in use in South America, especially among the Indians on their journeys across the Andes, who chew the leaves to allay thirst, hunger and fatigue, thus enabling them to perform long journeys with limited quantities of food. The officinal preparations are the tincture, elixir and fluid extract. The dose of the latter from one to two tea-spoonfuls well diluted, though experimentally I have taken much larger doses, producing for a half hour or more exhilarating influences on the brain much like that of ether or amyl nitrite. This soon passes away leaving the system in a state of quietude for several hours without any special desire for more, thus differing from other nerve stimulants. I administered it to a gentleman Mr. W. an artist, of sedentary habits, who had long suffered with torpid digestion and gaseous accumulations, producing immediate relief, although he had tried many other remedies in vain; the dose being a teaspoonful before meals and at bedtime, in a wine glass of water. In his case there were no unpleasant symptoms. Since, I have administered it in many like cases for gastric and enteric debility with uniform good results. I have found the same good results in influenza, slight colds, but especially in irritable cough of consumptives, giving them decided relief especially at night, a most important desideratum in the latter destructive stage of this disease, or as Bartholow says, that it lessens fatigue and increases the respiratory powers, and is of the opinion that it would prove useful in phthisis, in wasting diseases and in convalescing from acute disorders.

Dr. Jas. W. Hole, Salem, Ohio, (THERAPEUTIC GAZETTE, page 290,) maintains this opinion and cites several cases in proof. Indeed the journals of the past few months contain more or less upon the uses of this drug as a restorative and reclaimer of the opium habit. Lately I have treated several cases of dypsomania and alcoholism with this preparation. I found that they recovered sooner and easier than on any other plan the Coca taking the place of alcohol, readily relieving the great thirst, with the advantage of cutting short its administration at option without depression or other unpleasant effects.

As to its aphrodisiacal powers, my attention was first drawn to this by the voluntary remarks of those to whom I had administered it. Since then I have treated several cases of sexual exhaustion of a temporary nature, with very satisfactory results, but as a permanent tonic in these cases, I must continue to give the preference to,

Damiana (*Turnera Aphrodisiaca.*)—This remedy I had the pleasure of introducing to the American profession several years ago, although it was known in Mexico since early in 1600 A. D. It is now generally known and admitted to be the best permanent tonic in the treatment of debility of the genito-urinary organs. If there has been any question as to its merits in this particular, it has been caused by the numerous imitations and counterfeit

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preparations that have been on the market since its introduction, or as J. F. Hammond, says, "the greatest impediment in its way to professional confidence is the large amount of spurious preperations upon the shelves of our merchants, or has been rendered worthless from age or improper handling, hence the many disappointments." He says the true damiana is a great remedy in renal and vesical diseases.

"In nephritic albuminuria the results were from the beginning most marked; the albumen slowly but steadily disappeared, the patient at the same time constantly improving until perfect restoration to health ensued. In combination with atropia, it is one of our best remedies in inflammatory diseases of the kidneys."

Although slower and more silent than buchu, uva ursi, and other positive diuretics, the true Damiana, persistently administered, will meet every indication fulfilled by these drugs, and is and must prove to be their superior in all inflammatory diseases of the mucous membrane of the genito-urinary apparatus. Damiana in combination with tincture cimicifuga is an elegant remedy in painful diseases of the muscular coat of the bladder, and in neurotic diseases involving the kidneys.

The late Prof. E. R. Peaslee, (my preceptor) frequently spoke in high terms of the different preparations of damiana in diseases of the female urinary organs. Many other authorities might be quoted in the same direction. In my hands it has fully sustained its early reputation.

Case 1. A young lady æt. 20 years, from shock or fright, suffered abortion during first pregnancy. After this her menses were scant and irregular, with failing health for several years. Did not become pregnant during this time. She and husband were anxious for an heir, as an estate depended on the issue, aside from the natural desire of maternity. After careful examination of all the why's and wherefores, I diagnosed a neuro-asthenic condition with consequent inertia of the genito-urinary organs. I ordered generous hygiene, gentle exercise, and administered fluid extract damiana, three or four times daily, commencing with small doses and gradually increasing. After a few months the menses became more regular and pronounced, with general improvement of health and spirits, and at the third month of treatment became enciente, and went through to regular term with happy delivery. This is cited as a typical case of many others that could be reported, where damiana acted an admirable part in the irregularities of woman.

Case 2. A gentleman, æt. 30 years, of delicate frame and appearance. Constantly complains of feeble digestion, bowels irregular and constipated, complexion sallow, sleeps badly, habits sedentary, given greatly to literature, frequently delivers public readings, etc. Has been married several years without issue. Wife buxom, active, and regular. Upon examination find genital organs rather small with incomplete erection. Semen under the glass exhibits but few evidences of life and vigor. Ordered a more active life, less study, regular hours and diet. Placed him on damiana. After six months of careful management, he was greatly restored. Reports his wife in a fair way to become a mother.

Case 3. Gynephobia (fear of woman.) Mr. ——'s case presents some interesting points. When in bed alone, his erections were sufficient, but in company with a woman he utterly failed to perform the act. There was no lesion of the organs. I reported this case as a failure. Electricity, rest, cold bath, and the free use of damiana utterly failed. I have met several such cases, and termed them gynephobia.

In cases of impotence from masturbation, accompanied with spermatorrhœa, we find morbid changes of the vesicular seminales, ejaculatory duct, bulbous portion of urethra and prostate gland. Such cases require surgical and special treatment, but I have found much advantage to result from the use of electricity and the free use of damiana. These agents possess tonic power over the nervous apparatus generally, and they act most favorably upon the nerve centres presiding over the functions of the urino-genital organs.

I do not hesitate from my experience in the use of damiana to continue my recommendation of it to the consideration of the profession, asking for the genuine article, a fair trial.

The name damiana appears in the mythology of the Ephesians. In the Temple of Diana, the most gorgeous and beautiful Halls were termed "The Damiana Corridors," or "The Amoranda," "The Abode of Love."

Jamaica Dogwood (*Piscidia Erythrina.*)—Although this remedy is by no means a new one, its better qualities seem to have been undeveloped until lately. It has been placed upon the shelves as being secondary, or at least thought to contain virtues of a very moderate character. Within the past year the medical literature has frequently declared it to be an opiate and hypnotic of no mean pretensions, without the disadvantages which follow many of the present anodynes, viz. depression, constipation, locked secretions, etc., etc.

My experience with this drug has extended over a period of six months, which has taught me its value in many cases of neuralgia, especially about the face and teeth. As an immediate relief to tooth-ache of decayed and broken teeth, I know no remedy to compare with it.

The preparations are the tincture, and fluid extract; the dose being from 10 to 20 drops to produce natural rest, which is not followed by any unpleasant nervous phenomena.

Electro-Therapeutics.

Man still remains unsatisfied,
  Still strives to mend his state.
What! though the months are changed to days
When speeds him on his distant ways,
Impatient, still, at time's delays,
  He never learns to wait.

And only when the lightning's flash
  Submissive owns his power,
And, humble as a cringing slave,
Bridges for him the Atlantic wave,
  He rests a single hour;
When Volta's pile and Franklin's kite
  And Morse and Henry all unite
  To give imperial sway.

Well, then, may grateful realms prolong
The boastings of Electric song:
"With armies of signs I have girdled the world,
I am felt in the words they indite;
They move on their way with no banner unfurled,
With a speed that is greater than light.

They will march at an infant's command,
They reck not the storm-laden weather;
And the wires that pervade Ocean, Ether and Land
Are the chains that bind nations together."

The attention of Electricians was concentrated upon electro-physics until the perfection of the mechanical contrivance by Morse. In due time it was made known to the medical profession that electricity was a powerful therapeutical agent, and its application in the treatment of disease wrested from the hands of quacks and charlatans. Electro-therapy is now an important specialty in medicine. The close analogy of electric to nerve force at once caused attention to be directed to its employment in the treatment of nervous diseases; but experiment has shown that it is applicable to the treatment, the relief and cure of other pathological conditions. Thus it may be used as a tonic in cases of nervous debility, in cases of paralysis, so as to take the place of nerve force which presides over functions of nutrition. The nutrition of the paralysed limb is thus sustained, and likewise the revival of nervous energy promoted. It is apparent from the close analogy of electricity to nerve force, that this agent embraces a wide range of morbid conditions. Through the nervous cords which act as conductors, every part of the animal organism can be reached. In this way secretion and elimination of morbid products may be promoted, and the organ or apparatus restored to healthy action. The three great forces of nature are heat, light, and electricity. These are the forces under whose influence vegetation is produced. Heat and moisture cause the germ of life in seed to awaken, the materials stored up for the use of the embryo undergo changes both chemical and mechanical, so as to be fit for appropriation. The archecture of the plant begins. Spire shoots up from the bud, under the influence of the sun's light, the food afforded by the atmosphere is appropriated. Forces are active at the root, forces are active in the blade. There is no doubt in my opinion that electricity is one of the active forces which contributes to plant growth. We have all the conditions of its generation, heat, moisture, unequal heating of mineral substances, causing thermo-electricity. We have also chemical action. It is impossible to draw a line of demarcation between vegetable and animal structure, and we doubt not that heat, light, and electricity are the physical forces under which animal structure is built up. The light of the sun is as necessary to the vigor and health of the animal, as of the vegetable kingdom. Indeed, as already stated, the two shade into each other so as to render it impossible to say where the vegetable ceases, and the animal begins. Electricity being one of the forces which contribute to the animal organism, is necessary to functional health.

The various conditions under which electricity is manifested, enable us to apply it to a variety of morbid conditions. Its wonderful decomposing power (electrolysis), has been utilized, by the physician. The intense heat incident to its manifestation by certain combinations, has enabled the surgeon to substitute in many cases the cautery for the knife, indeed to apply it to the section of morbid growths not remedial by the knife.

It may be stated that in order that progress shall be had in any branch of science, appropriate apparatus is necessary. Scientific speculation is a great lever, but it must be controlled by experiment, speculation must be tested by experiment, for the human mind is too apt to be seduced by the pleasures of speculative philosophy, and too prone to abandon the paths of observation and sound induction.

From the want of apparatus, and the ignorance of its different modes of manifestation, electricity as a therapeutic agent was seized upon by the charlatan, and neglected by intelligent practitioners of medicine. By a curious co-incidence the discoveries in electric science and improved apparatus was accompanied by great discoveries in regard to the functions of the nervous system. Whilst Oersted, Ampere, Faraday and others were making rapid strides in electric science, Sir Charles Bell, Majendie, Marshall Hall, Claude Bernard, Brown-Sequard and others were unravelling the intricacies of the nervous system. In no era of the world has there ever been such activity in scientific investigations, and the applications of science to the material comfort and welfare of mankind.

At last the votaries of medicine contribute their quota, and many of the most eminent of the profession are devoting their talents and energies to the therapeutical effects of electric force in the treatment of disease.

Electro-Cautery.—As the result of our own experience we may state that the successful application of electricity is strikingly manifested in the removal of morbid growths by the electro-cautery.

This is especially true of those soft and bleeding tumors of the rectum, vagina and other passages where the use of the knife is impracticable.

Use of Electricity in cases of suspended Vital Function.—We have been induced to try the effects of electricity in cases of suspended vital function resulting from narcosis, and cases of apparent death from drowning, from experiments upon living rabbits, made by Dr. Wilson Phillip, of England, from which it appears that electric force was used to substitute nerve power. The pneumogastric nerve of the animal, was severed immediately after it had eaten some parsley. After the death of the animal, which had great difficulty of breathing, and perished apparently from suffocation, the stomach was opened and the parsley found undigested. A similar experiment of section of pneumogastric nerve was made, but a current of galvanism passed along the nerve, and continued for twenty-six hours. No difficulty of breathing occurred as long as the current was kept up. The animal was killed, the stomach examined, the parsley was completely digested. It thus appeared that galvanic energy is capable of supplying nervous influence in that the process of digestion may be carried on. Similar experiments were made upon dogs with like results.

The following case illustrate the beneficial effects

of electricity in restoring suspended and impaired vital function:

Case 1. In summer of 1873, I was called to see a child, Jennie C., suffering from a poisonous dose of laudanum. Every other means except electricity had been tried without benefit. The laudanum had been swallowed some twelve hours. A powerful current was continued for more than three hours, with the result of complete restoration. The respiration from nine in the minute was increased to eighteen or twenty, when the pupils began to dilate, the pulse became normal, and consciousness restored; vomiting and purging ensued.

The current was passed by placing the positive pole over the pneumogastric nerve at the angle of the sternocleido-mastoid muscle, and the negative pole over the epigastrium.

Case 2.—1874. I was called to attend a person in the Maryland Inebriate Asylum, who attempted suicide by taking opium. The usual remedies had been tried and proved unavailing. A Faradic current was applied and continued from 3 A. M., until 7 A. M. The respiration rose from seven to eighteen the minute. Patient restored.

Case 3. Was one of dyspnœa from delirium tremens. Faradism was applied, but the poles reversed in order to obtain a sedative rather than a tonic effect. Within a few hours nervous excitement subsided, and aided by large and frequent doses of digitalis, sleep ensued. The patient recovered.

Case 4. Taken from the Medical and Surgical Reporter, reported by Ed. C. Harwood. An infant aged 19 days, had been narcotised by morphine. He was relieved by means of the Faradic battery.

Case 5. Reported by Prof. W. H. Pancoast, Med. and Surg. Reporter, May 9th, 1874. The patient had taken 120 grains of Chloral and 8 grains of Morphia. The battery was used fourteen hours and life saved.

Case 6. George, a colored boy, was fished out of the dock, half an hour after immersion, apparently dead. I had but slight hopes of his resuscitation. There was some heat about the spinal column and head. I applied a powerful secondary current for several hours. At length I discovered faint heart actions, then occasional sighs, which gradually augmented. The organs gradually resumed their functions. The patient was restored to life.

Case 7. Is reported in the Va. Med. Monthly, May 1874. "Resuscitation after thirteen and a half minutes of apparent death." At a meeting of the College of Physicians and Surgeons, N. Y. March 11, Dr. L. A. Sayre exhibited a string of beads one of which had been taken from the trachea of a child seven years of age....She was relieved by tracheotomy....She coughed out the bead, gave one inspiration, and died....Alcohol was injected into the rectum, and the galvanic current passed through the phrenic nerve....she immediately rallied and then had no further trouble.

Such are some of the wonderful effects of electricity (Faradism), in restoring suspended animation. They suggest the propriety of placing proper batteries and instruments in all life-saving stations, police head-quarters, hospitals and other institutions, so that the aid of this powerful and wonderful agent may be invoked in all cases of suspended vital functions.

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The Active Properties of Plants Considered as a Feature of Relationship. (Continued.)

By Volney M. Spalding, B. A., Assistant Professor in Charge of Botany. University of Michigan

THE ROSACEÆ constitute an order of plants particularly distinguished, as far as concerns active properties, for their astringency. The roots of the common blackberry and its mildly astringent fruits have proven most valuable medicinal agents, both in regular and domestic practice. The same property is conspicuous in Agrimony, Geum, Tormentil and numerous other representatives of the family.

In the suborder Drupaceæ, however, and to some extent among the Pomaceæ more or less hydrocyanic acid is developed, and to this, with a bitter principle associated with it, are mainly attributed the virtues of wild Cherry Bark "one of the most valuable of our indigenous remedies." To the development of greater quantities of hydrocyanic acid, too, are due the deleterious effects which sometimes follow the careless use of bitter Almond flavoring or the employment of the kernels of other drupaceous fruits for the same purpose.

The acid in question is produced chiefly in species belonging to the suborders just mentioned, while astringent properties, though characteristic of the order as a whole are more developed in the suborders, or tribes, Roseæ, Sanguisorbeæ and Dryadeæ.

The ultimate relationship of the Saxifragaceæ with the foregoing order is indicated not only by the very striking similarity of botanical characters but also by the possession of corresponding astringent properties. These are remarkably developed in Heuchera Americana, a well-known indigenous species, giving it the common name of "Alum root," also in the seeds of the common currant and in other species.

The Cucurbitaceæ, or Cucumber family, distinguished botanically by its gourdlike fruits and climbing habits, is noted therapeutically for an acrid, bitter, purgative property which renders many of its species drastic cathartics. Citrullus Colocynthis, the "Bitter Apple" of our materia medica, possesses such properties to a remarkable degree, even the dust inhaled in handling the dried pulp reveals the intense bitterness of the fruit. The White Bryony root of Europe and the Elaterium of the British Pharmacopœia, derived from the Squirting Cucumber, are both violent cathartics and in over doses, poisonous. Luffa purgans and Luffa drastica, sometimes called American Colocynth, are also violently purgative. However, then, the acrid, purgative properties of plants of this family may become diffused and modified under cultivation its species can never be entitled to perfect confidence. Green cucumbers, for example, properly cultivated, may be harmless, but the "old bitterness" in their nature is liable to reappear in unaccountable reversions to the

ancestral character. "Blood will tell" in the human family, and none the less certainly are deep physiological peculiarities perpetuated down the genetic line of plant life.

The Parsley family, known among botanists as the Umbelliferæ, from the umbellate inflavorescence assumed by most of its species, is very sharply defined by other marked botanical characters and merits special notice for the various properties that have been ascribed to its representatives. Following a common and perhaps useful arrangement, the plants of this order may be classified as:

1. Esculent. Such are the Celery, Carrot, Parsnip, Parsley, Fennel, Lovage and various others.

2. Aromatic, Stimulant and Tonic. Among these are Dill, Coriander, Caraway, Angelica, Sumbul, etc.

3. Poisonous. These develop an acrid, narcotic juice and in many cases are highly dangerous. The celebrated Hemlock, Conium maculatum, and Water Hemlock, Cicuta maculata and C. virosa, together with Fool's Parsley, Aethusa Cynapium, are some of the most important of these.

4. Yielding fœtid Gum Resins. Assafœtida is one of the best known.

It would lead us too far from the object of this paper to discuss at length the relations of these four great divisions or to attempt to show their common origin and descent. A single case will serve to illustrate an important principle which has doubtless played a prominent part in the development history of the Umbelliferæ. The common Parsnip stands on the border-land between two (1 and 3) of the great divisions noticed above. In the wild state its root is slender, tapering, woody and poisonous, but when cultivated it becomes thickened and fleshy, more or less fusiform, and by some is highly esteemed for culinary purposes. On the other hand the cultivated variety if left to run wild soon reverts to what appears to be its earlier state, and the root becomes slender, fibrous and more or less poisonous. Now there is not evidence sufficient to enable us to declare that this case represents the history of all the remaining species of esculent Umbelliferæ, but with all the evidence at hand it appears that in the earlier history of this family these four divisions might well have been merged into one whose species could then be briefly designated as aromatic and narcotic plants often poisonous. Now, if this assumption is correct, and the tendency to revert to the poisonous character of some earlier form is at all common among them, there is good reason for regarding Umbelliferous plants with suspicion until they have been fully proven to be harmless or useful, and new remedies taken from this order should be subjected to rigid investigation before they are admitted to general use.

A number of families of rather less importance must be dismissed with little more than a glance, though they present very interesting testimony to the value of the principle under discussion. Such are the Lobeliaceæ, distinguished by the presence of an acrid, milky juice, and frequently by narcotic properties, as seen particularly in Lobelia inflata; the Apocynaceæ, or Dogbane family, also characterized by the production of milky juice and exhibiting powerful properties which are yet to be more fully investigated in such drugs as Quebracho bark, Dita bark and others; the narcotic Spigelia family furnishing such products as Pink-root, Nux Vomica, Ignata and Woorari; the bitter Gentianaceæ with their valuable tonics; and not least among them the convolvulaceæ, distinguished by their strongly purgative properties and represented by the well-known Jalap of commerce.

The Solanaceæ constitute a large and important order. Narcotic properties are exhibited by a large proportion of its species, though it is also the source of some of our most useful food plants. Belladonna, Stramonium, Hyoscyamus and Tobacco, the sources of such principles as atropia, daturia, hyoscyamia and nicotia have exercised a potent influence over the human family and the common potato, Solanum tuberosum, has contributed in no small measure to its maintenance. This last species shares to some extent the narcotic and poisonous properties of the family, but the tuber, being merely a receptacle for starch, does not develop these unless it is exposed to the light. The stalks, leaves and unripe fruits of the potato produce an active principle, apparently very powerful, which has not been fully investigated. All plants of the order are to be employed with care until their true nature is thoroughly tested.

Several other orders, well worthy of critical study, must be very briefly noticed. The Labiatæ are aromatic and stimulant. Spearmint, Peppermint, Pennyroyal, Sage, Lavender, Rosemary and a host of other familiar examples serve as illustrations. Wood Betony, Betonica officinalis, is prominent among the new remedies obtained from this family. Of the Figworts or Scrophulariaceæ the the best known in medicine are narcotic or purgative. Digitalis and Leptandra are prominent examples.

The representatives of the Polygonaceæ, Buckwheat family, are acid, astringent or purgative. The acidity of the common sorrel, the astringency of bistort root, Polygonum Bistorta, and the combination of both of these with decided purgative properties in rhubarb are familiar to all. The exceeding pungency of the Piperaceæ is well shown by such members of the order as Pepper, Cubebs and Matico, and the aromatic properties of the closely related Lauraceæ are well developed in Cinnamon, Cassia, Sassafras and Camphor.

The Euphorbiaceæ, or Spurges, a family of decidedly poisonous properties, are widely distributed and considerably employed in medicine. They are marked by very distinctive botanical characters and also by the presence of an acrid milky juice which is sometimes poisonous in the highest degree, as for instance is the case with Hura crepitans, the Sandbox tree of tropical America, whose "venomous juice" occasioned Boussingault an attack of erysipelas when he attempted its analysis. In many species, however, this acridity is but slightly developed or is neutralized by the presence of other principles. Some highly valuable medicinal plants are found in the order. Such are Ricinus communis, the Castor oil plant, Croton Tiglium, the source of Croton oil, and various others. It is to be remembered, however, that the family is a dangerous one. Even the seeds from which the mild and effectual cathartic Castor oil is derived are "when taken

whole, extremely acrid, and have produced death," and the roots of Manihot utilissima, from which tapioca, a most harmless and useful article of food, is obtained, are exceedingly virulent. In fact so uniformly are acrid and poisonous properties present among the members of this family that even from ancient times "plants with a tri-coccous fruit were regarded as hurtful and suspicious.

Last among dicotyledonous plants, but by no means least, are the coniferæ, the great source of balsam, resin and turpentine. A few species, of which Laxus baccata, the common Yew, is most prominent, are considered poisonous. The various therapeutic uses of the products of this order as stimulants, etc. and their numerous applications in the arts are too well known to require extended notice.

[Written for the Therapeutic Gazette.]

Erythroxylon Coca.

By W. H. Bentley, M. D. LL. D., Valley Oak, Ky.

THE first time I heard of Erythroxylon Coca, was in 1869, when I recived a pamphlet with the request to take, on agency, certain proprietary medicines therein described, and which were prepared by an advertising physician, now deceased, but then living in one of the eastern states. Among them was a very highly recommended cough mixture, certified to be very efficacious in all chronic diseases of the lungs and of the air passages. The medicines were not nostrums as all the formulæ were given, or, at least, purported to be given. Among the ingredients one with the title "Ninga," was mentioned. A very long and minute description of this plant ensued. Highly stimulant, tonic and nutritive properties were claimed for this plant, which the writer claimed to have discovered from information received from the natives, and especially the Indians, during his South American travels, extending over a period of several years. Among other things, it was claimed that the Indians would perform long journeys with no other food than a few "Ninga" leaves.

I found that the writer possessed much learning, a good deal of genius and superior shrewdness. I wrote to him declining the sale of his medicines, but asking a confidential, yet candid, statement in regard to the wonderful plant, and asking for a sample at even an unreasonable price. I received a reply in due course of mail informing me that the statements in the pamphlet were true, entirely declining to furnish me any of the plant, but stating that " Ninga " was one of the local Indian names, and that the botanical name was Erythroxylon Coca.

At that time I had a lay friend residing in South America with headquarters in Lima, though his business required much travel, and, in this way, he visited Paraguay, Bolivia, Equador, etc. I knew, too, that he was perfectly reliable, for we had been room-mates during two years in college, graduating in the same class. After this he went to the law, I to medicine. He soon abandoned his profession for trade, and went to reside in South America as above stated. To this friend I wrote, requesting all the information he could conveniently obtain from South American physicians respecting the Erythroxylon, (provided it was not a myth,) together with a small supply of the plant.

In about nine months I received his reply, with some seventy-three pages of manuscript, containing statements from thirty-three different physicians together with about one pound of the Erythroxylon leaves made up in different parcels, as my friend could purchase.

The samples were mostly different in appearance, and as I found, different also in active properties. I went to work making tinctures, being guided in their use by the manuscript statements of the South American doctors, cautiously feeling my way, so to speak, for there was great diversity in the statements both as to the diseases in which it was indicated, and as to its physiological effects.

I prescribed it in chronic diseases of the lungs and bronchi, leucorrhœa, spermatorrhœa, etc., and, when the article was good, always, or nearly so, with gratifying results ; but, as my supply was small and much of it nearly or quite worthless, I did not reach any very definite conclusions. My first practice with the Coca was in the year 1870-71. In 1872 I saw the saturated tincture, also the Cocoain advertised by an eastern house. I immediately ordered a dozen pints of tincture and one-fourth dozen bottles of the Cocoain. I used all of this except a single pint of the tincture within about one year—this pint I took myself in a case of convalescence from an attack of fever, in the spring of 1878. Some of this was used successfully in combating the opium-habit as indicated in an article which I furnished New Preparations, and which was published in that journal July, 1878. I then promised a more extended research into the properties of the Erythroxylon Coca, which I have made under more favorable circumstances, for I have used the fluid extract as prepared by Messrs. Parke, Davis & Co., and since the date of my communication to New Preparations, I have purchased on an average one pound of their fluid extract Erythroxylon Coca a month, testing it in every variety of cases (except paralysis) that I considered dependent upon defective innervation.

My theory of tubercular consumption, for instance, is, that it is nervous disease, so, I think are dyspepsia and numerous other chronic diseases. Take consumption for an illustration: I think the brain and nerves become enervated from various causes, and from whatever cause, digestion and assimilation become impaired; next the blood, by losing some of its healthy constituents, beco nes too thin and watery, and the circulation thereby languid and sluggish. Then, as it passes through the lungs, a spongy tissue, it parts with a portion of its fibrine, which, being semi-vitalized, organizes in the form of tubercle.

The opium and alcoholic habits, I conceive are formed thus: Both opium and alcohol are stimulants, and, if pushed, become narcotics. When taken into the stomach both alike produce, at first, an agreeable feeling of stimulation. Both soon pass away and leave the system more or less depressed. This condition calls for more stimulation, oft repeated the nervous system is more or less broken down, and a real disease

is found, weakening the will-power—so much as to bring about a complete surrender of manhood to the new master.

Now to cure any of these, we want, not only a stimulant, but a new tonic, something that will produce the stimulus of opium or alcohol, as the case may be, and leave the nervous system braced, so as not to be followed by any depression. My long experience with Erythroxylon Coca, and my close observation of its action in both disease and health, I believe that in this valuable agent we possess the very desirable drug—the desideratum.

In the country producing it, the natives eat it, and become as much its slave as De Quincy ever was to opium, or Beau Brummel ever was to wine, yet it produces no bad results. It promotes not only longevity but vital energy, enterprise and a desire for labor. Those addicted to the Coca habit are, at least in some places, called coqueros, and according to Dr. Quisina, one of the physicians reporting in my manuscript, live to an indefinite age. He reports an old man, a half-breed, 170 years old, and numbers of others over 100 years of age, but states that the coqueros loose all their virile powers. Dr. Q, is a Bolivian physican, then (Jan. 1870) 58 years old. He and several others stated that it would, if used to excess, entirely destroy the sexual desire. My experience, however, is the reverse of this as far as it goes, but, I have made no "coqueros" in my practice. In two cases of impotency, treated with Coca alone, the desired effect has been produced, after the strychnia, savin, Ignatius bean and phosphorus treatment had utterly failed.

In several cases of spermatorrhœa I have used it with complete success. To report these cases in detail would extend this article beyond proper limits. One case, however, is too striking, I conceive, to be omitted.

Mr. G. A., bachelor, æt. 47, residing on a farm with his servants only, came to me October 1879. He was greatly distressed in mind and utterly depressed in spirit. He had been a "great rake," and had, consequently, indulged to extreme excess his sexual passions, or, as Mrs. Elmira Slenker would put it, had been guilty of great "sexual intemperance." He had lost all sexual power; had a serious gleet; was much reduced in flesh; was sullen and morose, sitting for hours silently gazing at vacuity, and then talking with great volubility of his affections as long as he could retain an auditor.

At first I gave him iron, quinine and strychnia in combination. He took this for six months. His appetite and digestion returned. He also regained his color and flesh, but his craziness remained because there was no amelioration of his impotency I then put him upon phosphorus with no better result after thirty days' use. At this juncture I prescribed for him two pounds fluid extract Coca, to be taken in teaspoonful doses four times a day, namely, before meals and at bed time. "It acted like a charm," and he was perfectly well of all his diseases before he had used all his medicine, and remains so at this writing, November, 1880.

Alstonia Scholaris.

By Louisa Reed Stowell, M. S., Assistant in Microscopical Botany in the University of Michigan.

ALSTONIA SCHOLARIS is found in India, in the tropical islands and in Northern Africa.

It is a handsome forest tree from 50 to 80 feet in height, having a tall slender trunk with spreading branches that always grow in whorles. The leaves are also found in whorles of from five to seven, (Fig. 1.) They are nearly sessile, four to eight inches long and lanceolate or oblong with bluntly acuminate ends. The midrib is prominent on the

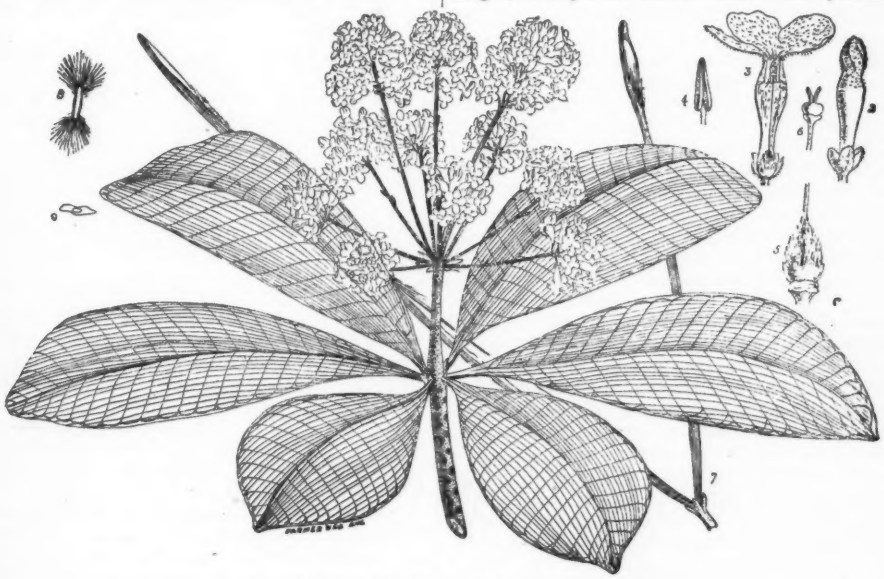

FIG. 1. ALSTONIA SCHOLARIS. (BENTLEY AND TRIMEN.)

lower surface, with numerous parallel, transverse veins. They are of a bright green color on the upper surface, but pale and dull on the lower. The tree flowers twice a year, in March and December.

DESCRIPTION OF THE BARK.

The medicinal part of the tree is the bark. This is found in the market in irregular pieces from ⅛ to ½ an inch in thickness and of a spongy texture. The external surface is rough and uneven and of a gray-

FIG. 2. Cross Section of Dita Bark. Three times its natural size. a, outer bark. b, middle bark. c, inner bark.

ish-brown color, with numerous cream-colored patches that flake off like scales. The inner surface is mealy in consistency, and of a bright yellow color. It is of no particular odor and its taste is purely bitter, neither aromatic nor acid.

MICROSCOPICAL STRUCTURE.

The outer layer of the bark is composed of from eight to twenty rows of tabular parenchyma. The cells are thick walled and empty, (see *a*, Fig. 3.) The cellulose of the walls is colored a deep amber. As a dividing line between this structure and the next, that is, between the outer and middle layers of the bark is found a delicate texture consisting of three or four rows of clear white empty cells, (*d*, Fig. 3.) This outer layer is called the cortical layer by some authors.

The middle layer of the bark, which is the principal part of the whole specimen in bulk, (*b*, Figs. 2 and 3) is composed of loosely packed oval cells, with masses of enormous, bright yellow stone cells, scattered thickly through the layer, (Fig. 3, *e*.) They are so numerous as to be seen with the naked eye, and they give the mottled appearance to the outer part of this layer of the bark. These stone cells (or *sclerenchyma*) are much smaller toward the inner bark, though they do not disappear entirely. Many of the cells of the middle bark contain beautiful crystals of calcium oxalate. Found much more numerous toward the outer edge (*f*, Fig. 3). Some of the cells are enlarged and filled with oil or the essential properties of the plant.

We find the inner layer of the bark is narrow and composed of thin walled, irregularly packed cells, with occasionally an oil gland. The inner part of the bark is traversed by waving medullary rays, loaded with minute starch grains. A longitudinal section of the middle layer gives a few large laticiferous vessels, which contain the latex or the concrete juice of the tree—in brownish masses.

HISTORY.

Alstonia Scholaris was first described and illustrated by Rheede, in 1678. Although its praises were sung by the poets before the Christian era, according to Dr. Rice who found some ancient Sanskrit epic poetry on the subject of Alstonia. In 1841 Rumphius again describes the tree and gives the probable origin of the name *Scholaris*. It seems the school children used to make slates from the close-grained wood of this tree, making the letters on the slab with sand. The plant is named Alstonia in honor of Charles Alston, Professor of Botany and Materia Medica in the University of Edinburgh,

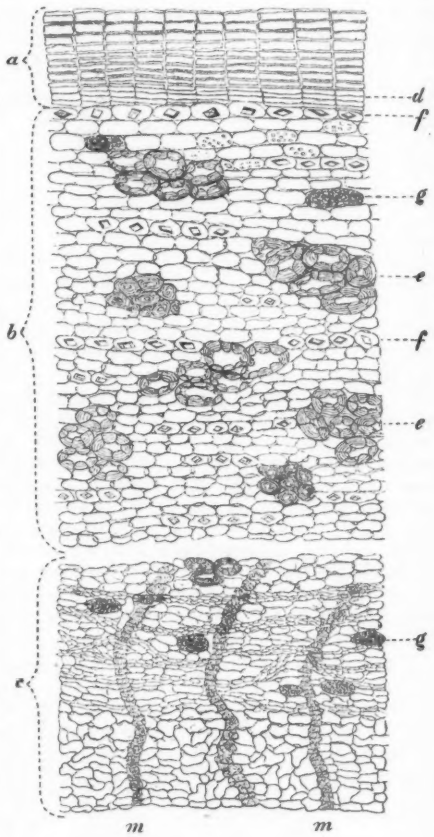

FIG. 3. Cross Section of Dita Bark. x 70 diameters. a, outer bark; b, middle bark; c, inner bark; f, crystalls; e, stone cells; g, oil glands; m, medullary rays.

from 1740—1760. It was named *Echites Scholaris* by Linnæus. The common name among the island natives where it is found is *Satween*. In the Philippines and to some extent in the United States, it is known as Dita Bark. It is also called the "devil tree" and Palimara of Bombay.

The drug is officinal in the Pharmacopœia of India. It is not employed to any extent in Europe, and is not recognized in either the British Pharmacopœia, or in the U. S. Dispensatory. Descriptions are given of it, however, in Bentley and Trimen's Medical Plants, No. 173; in Flückiger and Hanbury's Pharmacographia, page 421 (new edition) and in the National Dispensatory, page 140.

There is a large tree of Alstonia Scholaris growing now in the Royal gardens of Kew.

It possesses strong tonic and antiperiodic properties and is ardently recommended by many as a substitute for quinine.

ALSTONIA CONSTRICTA.

Closely related to this drug is Alstonia Constricta, called the Australian fever-bark. It is occasionally imported from India and has been sold in London as Bebeeru bark. It contains no alkaloid, according to Holmes of London. The bark is fibrous internally and rough and corky externally, though all of the specimens which it has been my fortune to meet are more delicate and of a lighter color than the bark of Alstonia Scholaris.

[Reported for the Therapeutic Gazette.]

On the use of Cannabis Indica in Certain forms of Neuralgia.

Abstract of a Paper read before the Kalamazoo District Medical Society, by O. F. Thomas, M. D. Lawton, Mich.

WE frequently meet with patients who cannot, or think they cannot, take morphine or opium in any of its preparations. This inability is often imaginary, especially in the case of "nervous" women who declare that morphine makes them wild, and that they see everything etc., but we sometimes have to prescribe for those who are proof against every disguise and deception when you attempt to give morphine. Prostration, nervousness, nausea and vomiting, and a train of disagreeable symptoms follow which are much more aggravating than the original disorder, oftentimes, and the pain is not always arrested by any dose within the bounds of safety, while the disagreeable symptoms may be produced by the minimum dose, a quantity that would produce no effect in a system tolerant of its action. In such a case the physician looks around for some substitute for the matchless drug, and probably gives a dose of chloral or bromide or some of the late additions to the materia medica, with success, but he fails to produce that state of ease and beatitude which a hypodermic injection of morphine produces in a frame lately racked with pain.

A perfect substitute for opium without its sometimes unpleasant features, is a great desideratum with the profession, but it has not, and probably never will be discovered. It would be rash to say that it *never* will be discovered, for among the vast productions of the vegetable world it would seem singular that we cannot find something to take the place of the inspissated juice of a species of poppies. Perhaps the Jamaica dogwood may prove to possess the anodyne properties claimed for it, and in such a case be a nearer substitute than anything yet known. The writer has tried it a number of times, but with partial success only, possibly from ignorance as to the proper dose, or from an excess of caution.

In the present state of medical knowledge it is impossible to rely on any one remedy as a substitute, and in one typical case of ovarian neuralgia which I wish to describe, most of the well known anodynes and narcotics were tried and discarded before the right one was discovered, and then nothing more was necessary.

I was called to attend a widow lady sometime ago, æt. 30, childless, of sanguino-nervous temperament, and found her suffering with intense pain in the left inguinal region, shooting down the inside of the thigh and into the bladder. The pain was of an intermittent character, but at no time going entirely off, and when it was at its height her cries and screams could be heard some distance from the house. The patient informed me that she could not take morphine, but believing that to be mere fancy, I persuaded her to let me give her a hypodermic injection of morphia, which I did as near the seat of the pain as possible. Her suffering was relieved in a great measure in about half an hour, and I took my departure, promising to call again by the time I believed the effect of the morphine should be passing off. One and a half hours afterward was called again and found her in the same condition as at first, and very much prostrated with uncontrollable nausea and vomiting. I gave her chloral and bromide of potassium combined by the stomach but it was not retained for a moment. I then injected 30 grains of chloral and 40 of bromide of potassium in solution into the rectum. This produced a few hours sleep, but when awake again the pain returned and and the nausea also. Repeated the enema. When she awoke from the second injection the effect of the morphia had passed off and the stomach would retain medicine and some nourishment, and for one week I put her through all the treatment for ovarian neuralgia known to me: aconite, belladonna, gelsemium, chloral, the bromides, inhalation of chloroform, etc. Fomentations, anodyne and stimulating applications were also freely used. The bowels were kept in good condition and diuretics were freely used at first, although examination of the urine indicated no derangement of the urinary organs. But all was useless to remove the pain unless she was under the influence of chloroform or chloral. The latter I continued to give by enema, and I presume she used a pound of chloroform during the time. About a week after giving the morphia injection I ventured to give her morphia without her knowledge disguised by some other medicine. But it was unsuccessful, the same symptoms being produced as at first and I went back to the chloroform and chloral injections.

As this sort of thing was growing monotonous, I called in another physician and we gave her a vapor bath, then applied a plaster over the left ovary, but that did no good. Then I gave nothing at all.

It was about nine days before it occurred to me to try Cannabis Indica, and then I gave her one grain of the solid extract, and directed the dose to be repeated every three hours. Upon my return I was much gratified to find my patient out of pain lying in a half dosing condition in a state of easy languor. Continued the Cannabis Indica every four hours for four days and nights, then every six hours for a couple of days, then three times a day for a few days more. No other medicine was given after commencing with this and the lady made a good recovery. Since then I have used the Cannabis Indica in number of similar cases with good effect; but none of them was as severe as this, and probably all could have taken opium had I chosen to give it. As a substitute for opium, in certain cases, it undoubtedly acts superior to it. It produces no nausea, the bowels are not constipated,—on the contrary a laxative action is frequently produced.

I think this drug has not received the atttention its merits deserve, and I think one reason is the varying strength we find in different preparations, as well as the various prices charged for it. I have paid as high as $2.50 per ounce for it and have bought it as low as sixty cents. The United States Dispensatory gives the dose from one-half to fifteen grains. This extreme divergence in strength and price may well cause distrust as to applicability in ordinary practice, but the remedy consists in buying from reliable houses and using of only one manufacture after you commence. That which I used was from the laboratory of Parke, Davis & Co., Detroit, and I have found it uniformly reliable. These chemists make it in pills of one-fourth and one-half grain, but I believe any dose less than one grain, frequently repeated, is useless for any immediate effect. I have given it in two grain doses and have taken myself a single dose of three grains as an experiment.

[Written for the Therapeutic Gazette.]

Constipation Complicating Dyspepsia.

By E. Newton Campbell, M. D., Good Hope, Illinois.

ONLY those who have been in the stirrups can form any conception of the number who are afflicted with the aggravating functional disorder, constipation. Any remedy, the introduction of which adds in the least to the success of the treatment of this affection, merits both the consideration of the physician and the gratitude of the patient, for constipation is the obscure cause of more constitutional disturbances than even the profession are generally inclined to admit. This proposition being conceded Rhamnus Purshiana will take its place among the highly prized remedies of the practical physician's materia medica. In proof of the efficacy of this drug I respectfully submit the following report of a typical case :

Mrs. A., age 28. A lively brunette, the mother of one child, applied to me for relief of constipation. On investigating the case, I found the trouble to be of several years' standing, complicated (as you will always find it) with dyspepsia. She had been treated by a number of physicians, and invariably been subjected to cathartics. In a short time the trouble was greater than at first, until finely so discouraged and disheartened she had become that she despondently concluded that her days henceforth were to be full of suffering. After a calm and deliberate conversation with her, explaining the cause and true nature of her situation, she was willing to subject herself to another trial. I prescribed as follows :

℞. Ext. Rhamni Purshianæ fluidi ʒj.
Glycerinæ. ʒij.
Aquæ, ʒj.

M. Sig. Teaspoonful every four hours for two days, after which teaspoonful four times a day, until the bowels become lax, after which reduce the dose to three times a day, so gradually diminish, and by this procedure the bowels regained their wonted tonicity and acted naturally.

All I will say further is to quote the language of this lady, which expresses my feelings completely: "All thanks to the man that discovered this hidden treasure."

[Written for the Therapeutic Gazette.]

Ailanthus Glandulosa in Chorea.

By W. H. Harris, M. D., Canasergia, N. Y.

JENNIE B., æt. 13. Was called to see patient March 10th. Found her suffering from chorea. In getting the history of the case I found that it began to manifest itself the latter part of the preceding summer, but had not assumed alarming features until a few months before my first call. At that time the manifestations were painful to witness, the contortions violent, irregular motions extending to every member. She could speak only yes and no, and even these would require some minutes, she would wriggle herself out of her chair, and off the bed unless held firmly. Her appetite was but little impaired, but there was so much difficulty in feeding her, (she not being able to feed herself) that the system was suffering for want of nourishment. Temperature somewhat above normal, with accelerated, irregular pulse. I found that she had taken large quantities of medicine of one kind and another without benefit, and the parents were still anxious to try several other regular and irregular remedies, in connection with whatever I thought best to give. I refused to take the patient unless everything, of whatever form or nature, should be discontinued. To this they finally assented, and I resolved to test the efficacy of Ailanthus, of which I had received a sample bottle. Beginning at 10 A. M. I ordered ten drop doses every two hours, while she was awake. Saw her again next morning and found that she went to sleep at a quarter past 8 P. M., and slept nntil 6 A. M. without removing the bedclothes by her movements, a thing not known for a long time previous. Continued treatment for twenty-four hours and found her somewhat more quiet. On the fourth morning in answer to my question "how do you feel," she replied "better," quite readily.

Not to use up too much space and time I will simply say that the treatment was continued right along for a month, when her parents considered her cured, but I continued the medicine three times a day for another month, with small doses of Salicine as a general tonic, when all medication was discontinued. Patient is now attending school and is apparently as well as ever she was.

Reports on New Remedies.

[Written for The Therapeutic Gazette.]

Jamaica Dogwood in Pertussis.

By W. R. Alexander, Parksburg, W. Va.

THERE is no disease in which the treatment of the present day is more unsatisfactory than whooping cough. In fact, there is but a single medicine which the profession is agreed that there is reliable efficacy in. That medicine is Belladonna, which is both dangerous in its administration and not always satisfactory in its results, at least, such has been my experience. Pertussis being epidemic last fall as well as at the present time in this city and surrounding country, I was led to

make some experiments in the treatment of it with the fluid extract Jamaica Dogwood, my attention having been arrested by the prompt and peculiar effect of the Dogwood in coughs and bronchial troubles generally, in which I had many opportunities of prescribing it. The effect in whooping cough was quite satisfactory, and proved quite a specific in a number of cases. I now order it for a patient with as much confidence in its prompt results as I do quinine in malarial affections. It seems to control the reflex irritation of the branches of the pneumogastric nerves, which produces the spasms; and it cannot be excelled in pulmonary complications. Of course, where it is necessary, the little patient's strength must be sustained by stimulants, nourishment, etc. I give it to children at all ages and in any stage of the fever. The initial catarrh, the convulsive and the final catarrhal stages were all decidedly benefited, the spasmodic attacks being in many cases aborted. It can be administered in any expectorant syrup or mixture. My usual prescription for a child from 4 to 6 years old is as follows:

℞ Fl. ext. Jamaica dogwood. ʒ jss.
Syr. tolu, ʒ ij.
Syr. Acacia, ʒ ij.

M. Sig., teaspoonful every two, three or four hours, according to the violence of the spasm or cough. I have often when not near a drug store where I could have the above compounded, given a few drops of the fluid extract in a teaspoonful of water, and it acted just as well. Its successful administration to this class of, oftentimes, silent sufferers is very gratifying indeed, and makes great friends of the parents, who, almost invariably, believe there is no relief in medicine for whooping cough, and I have heard so many physicians say about the thing.

Gentlemen of the profession try the Dogwood and you will be pleased with the results. I would say just here that it is very necessary to get a reliable preparation. It will astonish you to see what a difference there is in it as made by the different manufactures. Parke, Davis & Co. make the best preparation of it I have ever used. It costs a trifle more but never disappoints in its effects. If I had any failures during its use it was when my preparation of it was not reliable. I hope the profession will report their experience with it.

Rhus Aromatica in Diabetes.

By A. Cressy, M. D., Hillsdale, Mich.

NOV. 14, 1879, Mrs. W. applied to me for professional aid. The patient was fifty years old, fleshy, and of active habits. During the year immediately preceding the above date, she had suffered from several attacks of intermitent fever, one in August being quite serious. For several weeks prior to Nov. 14, she had been aware of excess in the quantity of urine discharged, but her most urgent trouble was a painful itching, smarting eruption, upon the labia and adjacent parts. The urine showed a specific gravity of 1040 and evaporation and chemical tests detected an abundance of sugar. I was dealing with a pronounced case of diabetes. For the eruption, she was directed to bathe frequently, and apply cosmoline with carbolic acid. To excite torpid secretions, and overcome obstinate costiveness I prescribed:

℞ Hyd. Prot. iod. grs. jx.
Podophyllin, grs. iij.
Irisin, grs. v.
Pot. Chlor. grs. xxx.

M. Divide into six parts.

Sig. Take one at evening.

Nov. 21st. Secretions improved, bowels in fair condition. I had procured ʒ jv fluid ext. of Rhus Aromatica, and gave it to the patient with instructions to take 30 drops thrice daily, and report results in a week, but she was called to a distant city to care for a sick daughter, and I did not see her till Jan. 15th. She had taken all the medicine and was well, and there has been no recurrence of the disease.

Abstracts and Translations.

[Translated from the Medicinische Chirurgische Rundschau. October, 1880.]

On the most Sensitive Reagents for Poisons. By Prof. M. J. Rosbach (Berliner Klin. Wochenschr., p. 36, 1880.)

Chemists have long employed for the detection of several alkaloid and glucoside poisons, the extremely intense reaction of frogs, mice and other warm-blooded animals, as a physiological means of determining what would be almost impossible to accomplish by chemical investigation; as well as to ascertain the presence of such poisons in impure mixtures, such as the contents of the stomach. These poisons are: strychine, atropine with its congeners hyoscyamine, and Daturin; and further Veratrine, Antiarine, Curarine, Muscarine; lastly we might include Digitoxin, the most poisonus glucoside of Digitalis leaves, and still others.

Strychnine causes death in frogs and mice with tetanus in doses of 0.00005 (Falckjun).
Atropine causes dilatation of the pupil in man and warmblooded animals in doses of 0.001 gr. (Grilfe). 0.0000005 (Reüter).
Veratrine causes lengthening of the muscular curvel in frogs in doses of 0.00005 (Von Bezold).
Digitoxine causes paralysis of the systole in frogs in doses of 0.001 (Schmiedeberg).
Antiarine causes paralysis of the systole in frogs in doses of 0.00005 (Schmiedeberg).
Curarine causes partial paralysis of the periphery of the motor nerves in frogs in doses of 0.000005 (Preyer).
Muscarine causes paralysis of the diastole in frogs in doses of 0.0001 (Schmiedeberg).

These poisons can, therefore, be detected not only in very minute quantities, and determined as vegetable poisons, but can also be distinguished from each other by their characteristic reactions. Inorganic poisons with such an intense action on the animal economy in minute doses do not exist. Although the quantities mentioned are so extremely small that it would seem impossible to exceed the sensitiveness of the reactions, the author has been able to render the means of detection still more delicate. We need only to descend for means from the higher animals to the infusoria. These latter exhibit very characteristic reactions and are destroyed by means of much smaller alkaloid poisons, not because they are themselves more

sensitive but for the reason that they are infinitely smaller.

The characteristic appearances of infusoria after poisoning with alkaloids are, with relatively larger dose, a destruction of their molecular integrity and complete reduction to a shapeless detritus, this result following with lightning rapidity. In more moderate or smaller doses we obtain peculiar twisting or turning movements, severe swelling of the whole body, extreme dilatation and exhaustion of their contractile vesicle, and lastly destruction of the individual substance as before. To obtain an idea of the extremely small quantity necessary to produce these results a few examples may be taken from the observations of the author.

In the case of strychnia the dilatation and partial paralysis of the contractile vesicle, swelling of the body and rotary movements, occur when the solution has a strength of only one part in 15000. On taking a minute drop of water containing infusoria, weighing 0.001 gramme, and subjecting it to the action of the strychnia solution, the minimum quantity needed for producing the above results is 0.00000006 gramme (while for frogs 0.00005 are needed). With Veratria these reactions occur with a dilution of one to 8000, which would represent in a drop of 0.001 gramme weight a quantity of Veratria represented by 0.00000022,

With the much weaker quinine the infusoria are influenced by a solution of one in 5000, which in a drop of 0.002 gramme weight represents 0.0000001 gramme quinine: Atropia solution is required to contain one part in 1000, which percentage in a drop of 0.001 grain weight equals 0.000001 gramme atropia.

The author believes that there is a future for this method of determining the presence of minute quantities of poisonous alkaloids. Caustic alkalies, acids, require to have a concentration of over one to 400 or 600, and salts over one to 200 or 300 before exerting a poisonous action. No experiments have yet been conducted by the author with metallic salts.

The practical application of this method by physicians, medical jurists, and toxicologists is extremely easy. A solution containing infusoria can readily be prepared by leaving water in contact with bread and meat for several days in a warm room. A minute drop is then observed, without cover under the microscope; during the examination a trace of the fluid to be examined is added and allowed to commingle with it, the latter fluid being not too dilute. The changes which the infusoria undergo under the action of the poisons are so characteristic that they can not escape observation. Supposing the contents of a stomach under examination to amount to one litre and containing only 0.05 gramme strychnia a single drop would represent 0.0000025 of the poison, a quantity forty times larger than that used by the author in producing the reactions.

[From the Wiener Medicinische Blatter, No. 35, 1880.]

On Cotoin Preparations with Especial Reference to Their Application in Infantile Diarrhœa.

Prof. Pibram, of Prague, has reported in the "Prager Med. Wochenschrift" Nos. 30–33, 1880, the results of an extended series of experiments to determine the value of cotoin preparations in infantile diarrhœa, which experiments were begun in the year 1877. Use of powdered Coto bark, and the tincture was avoided on account of unfavorable secondary effects, cotoin being used almost exclusively, paracotoin in only a few cases. On account of the sparing solubility of these agents in water, they were administered in the form of powder, the dose being for the youngest nursing children, .02 grammes, this quantity increased in proportion to the age. The results obtained are formulated by the author as follows:

That cotoin is an excellent remedy to check rapidly the diarrhœa of various diseased processes. This property can be explained on the basis of an antiseptic (antizymotic) action. For the accomplishment of this purpose, the customary small doses are sufficient, which feature constitutes one of the excellencies of this remedy; a further advantage consists in its entire freedom from any disturbing influence on the peptic and diastatic functions of digestion, and besides has no narcotic properties. All these features strongly favor its employment in the dyspeptic diarrhœa of suckling infants, the experience obtained with its use in a sufficient number of cases, having verified the expectations of its value above other remedies; it is of course understood that dietetic measures assume a prominent part in the treatment of such cases.

In answer to the query, how much time was necessary in the treatment of diarrhœa? of varying severity and length of existence with Coto, to bring about cessation of the symptoms it was found that often 1 to 2 days elapsed, sometimes 4 days, before normal stools were produced.

These results were also repeatedly obtained in the diarrhœa of adults suffering from tuberculosis.

Against this it is true, in cases of rachitis, the diarrhœa at first decreasing rapidly, would often return and remain protracted until its final termination.

No unfavorable influence on nutrition could be observed.

In several cases a trial was made by administering cotoin indirectly, by giving it to the mother, but no effects were discoverable in the children, so that these finally obtained the remedy individually.

The mortality among cases of diarrhœa and rachitis in 1879, numbering 500 in all, was 34 which includes also the deaths occurring from complications (such as pneumonia, etc), amounting therefore to 6 7-10 per cent against a mortality of 14 7-10 per cent, in the year 1875 before the introduction of cotoin treatment. It is here to be noted also that in former years the facilities for obtaining a record of the mortality were not so good as at present.

The number of cases which received treatment with cotoin between 1877 and 1879 was 494.

[Translated for the Therapeutic Gazette from the Prager Medicinisch Wochsenschrift.]

On the Effectiveness of Chloral-Hydrate as a Topical Application.

The author has demonstrated the usefulness of Chloral-hydrate applied externally as well experi-

mentally on dogs, as clinically in cases of gaping wounds which granulated badly.

In the experiments with dogs, fresh wounds were made, and infected by application of infusion, of putrid meat. A part of these were treated with a 1–2 per cent solution of Chloral applied on compresses, while the remainder were covered with only a bandage kept moist with water.

The wounds treated with Chloral-hydrate solution quickly assumed a healthy appearance, the granulation was more pronounced and redder, and scars formed much more rapidly than with those left to themselves. A microscopic examination of the latter, disclosed a distinct superficial layer of minute globular bodies, whose reactions indicated them to be micrococcic forms, colonies of such having already become imbedded in the granulating surface.

The application of the Chloral solution caused their disappearance in from 1 to 3 days, while those indifferently treated maintained their existence much longer; in the former case the new capillary net work in the granulating tissue was much wider, the transformation of the granulating tissue into true cellular tissue, also taking place much more rapidly than in the wounds which were left to themselves.

The results obtained, as above, were further verified clinically, in the cases of different patients afflicted with chronic ulcerations of the leg, anthrax and paronychia.

The topical application of this remedy has also the effect of allaying the pain, and is worthy of trial as a disinfectant and destroyer of bacteria in other than surgical cases.

It is also especially adapted to the preservation of anatomical specimens.

Chloral-hydrate dissolved in sweet almond oil, and applied to the affected region of the face or head, allays even violent tooth or headache. The aqueous solution can also be used with advantage, in carious teeth, by applying it to the cavity on a dossil of cotton; as the solution, however, exerts an irritating action on the mucous membrane of the mouth, it is better to employ the remedy in substance as follows:

A few small crystals of Chloral-hydrate are enveloped in a little cotton, and the tampon thus formed, with its contents, introduced into the cavity until the chloral is dissolved. The liquid as soon as formed, may be expectorated and a few minutes after its application, the most violent toothache may be made to disappear.

[Translated for the Therapeutic Gazette from El Medico.]

The Stigmata of Maize or Indian Corn.

We have alluded to the good effects of this new remedy on former occasions, but at the present time would call the attention of the profession to the results of the last experiments. In the Congress of Montpellier Senor Castan, called attention to this medicine, which has been often tried and beneficially in nephritic colic. He had observed a speedy diminution of pain, and has attributed it more to this drug as a local anæsthetic than as a direct diuretic. Senor Denuca, of Bordeaux, has obtained excellent results in vesical catarrh, which he considered due to its peculiar action on the mucous membrane of the organs involved. Doctors Pons, Nerac, Quie, ral and Marcella, also observed its sedative effects, without increasing the volume of the urine. Drs. Paul and Landreux also have witnessed the good effects of this drug, but insisted that the amount of urine passed was greatly increased. In one notable case, of cirrhosis the urine increased from 500 grammes to 800, 1200 and 1500 grammes. In a woman of 68 years of age, with dropsy, with enormous swelling of the inferior extremities and enormous ascites, pulmonary congestion, and a large amount of albumen in the urine. The stigmata produced in 24 hours a flow of urine from 200 to 500, and afterwards 800 grammes, With the disappearance of the swollen extremities and ascites, the albumen was also lessened and the increasing debility of the system stopped. Before the use of this remedy, tonics and digitalis had been tried, but the latter produced toxic effects and no diuretic action. The conclusions of Dr. Landreaux are as follows:

1. The different preparations of stigmata of maize, not only modify the secretions of the kidneys, but cause a direct diuretic action.

2. This diuretic action is rapid, and in three or four days, is very evident.

3. These diuretic results not only relieve the debilitated kidneys, but lessen the action of the heart, and tones it,

4. The pulse becomes regular, and the arterial tension stronger.

5. The medicine produces no disturbing effects on the nervous system or the digestive organs.

6. The tolerance of this drug is complete, and absolute, and its adminstration in chronic debilitated cases can be continued for four or six weeks.

It appears then, said Dr. Dassein, that the experimenters have varied as to the diuretic effect of this remedy, and he must attribute it to the variable amount of the extract in a certain quantity, which may be owing to the condition of the soil, wet or dry, the climate, the time of gathering and the mode of drying, which can vary the amount from eight to thirty parts in every hundred. In regard to the syrups, he had found great variations, one sample being twice as strong as the other, judging from the effects.

Hydrophobia by Anagallis Arvensis.

Dr. Santin, of Madrid, republishes this remedy from a late article on the subject by Francisco Inglis. Of this plant they are six varieties, but of only one is the use, favorably known in the treatment of hydrophobia. It grows in the fields and gardens of the province of Ferrida. Dr. Inglis offers to send this plant to the court of Spain for trial in the disease, and asserts that he has cured several cases of hydrophobia.

[NOTE BY TRANSLATOR.—During the past thirty years, several cases of hydrophobia have been reported in different medical journals, though the cases cases similar in symptoms, to hydrophobia may have been really hysterical. One case may be given from my own practice. A girl æt. 16, was much frightened by a mad-dog, and parts of her dress torn by the dog, but no

lesion of the skin; several days afterwards convulsions came on, with a fear of water, inability to swallow, and a disposition to snap and bite the surrounding attendants. Finding the patient almost uncontrollable, without great force, I gave her chloroform and while partially under its influence succeeded in getting down with difficulty, twenty grs. hydrate chloral in two teaspoonfuls of water.

With each convulsion appearing chloroform was promptly administered from a small handkerchief in an ordinary sized cup, having two teaspoonfuls of chloroform poured on it. Under its influence and with a large purgative dose of calomel, aided by several enemas of soap and water, the convulsions lessened in violence and frequency in twenty-four hours. To prevent the tongue being lacerated, flattened corks were inserted between the teeth by attendants. Enemas of beef tea were given the second day and after that the patient could swallow and take nourishment. The hydrate chloral acted finely, producing no ill effects; the patient slept about twenty-two hours the first day; eighteen the second; sixteen the third; and the fourth day half the time, and when not asleep was quiet, The amount of chloral given was 200 grs. the first day; 140 the second; 100 the third; and 75 the last day. During the four days there was no consciousness and no remembrance of anything transpiring from the first convulsion. The case reported, if a fatal one, might have been attributed to the bite of the mad-dog, and similar cases may be mistaken for real hydrophobia. It yet remains to be proven that a genuine undoubted case of hydrophobia has recovered.

[Translated for The Therapeutic Gazette from the Populäre Zeitschrift für Homœopathie, Oct. 1, 1880.]

On Quebracho.

Prof. Penzoldt made a report on this drug and its favorable action before the Physico Medical Faculty, of Erlangen, in February last. His experiments were made with an aquerous solution of the alcoholic extract of the bark of Aspidosperma Quebracho. Ten grammes of the powd. bark were exhausted with 100 grammes of Alcohol, and the extract, obtained after filtration and evaporation, dissolved in pure water, again evaporated and lastly dissolved in 20 grammes of water. Applied subcutaneously it destroyed life in frogs with partial paralysis of the motor nerves (of central origin), paralysis of the respiratory functions and decrease of the frequency of the pulse (not depending on irritation of the vagus.) In rabbits it caused partial paralysis of the motor nerves, shortness of breath and slower pulse. According to the reports of Prof. Penzoldt, which furnish an elegant confirmation of the homœopathic law of similars, Quebracho has proved itself wonderfully efficacious in diseases, involving shortness of breath, as emphysema, bronchitis, phthisis and pleuritis, the patients invariably experiencing alleviation of the dyspnœa with a decrease of the Cyanosis and number of inspirations. The duration of the effects of a dose (1—2 teaspoonfuls) of his solution was 3 to 5 hours. A remarkable result, observed in a patient suffering from emphysema whose nose had assumed a dark blue color from acne and cyanosis, was the change in that organ to a bright rose-red color after each dose of Quebracho.

Quebracho wood which occurs in commerce as a tanning material, is said to possess similar properties though in a much less degree. Our medicinal armamentarium, though embracing such remedies as Calcarea, Arsenic and Naphthalin, is not entirely sufficient for all cases of dyspnœa and a proving of Quebracho is therefore much to be desired, which would no doubt discover other virtues of this remedy.

[Translated for the Therapeutic Gazette from the Prager Medicinische Wochenschrift, Oct. 27, 1880, from an article by Dr. Nitsche Zeltweg.]

On the Treatment of Burns.

The author as physician in chief to a large Iron mining and smelting company in Steirmark, has cases of burns very frequently presented for treatment, and has found the following method most successful:

The wound is first cleaned (without opening the blisters) then disinfected with a 2 per cent. solution of Carbolic acid, and covered with a thick furniture varnish prepared from linseed oil and litharge, in which 5 per cent. of salicylic acid has been dissolved by warming.

The varnish is allowed to dry and another coat applied; over this a layer of De Brun's cotton is placed of about 2–3 centimetres in thickness. The wound seldom suppurates, generally healing under the varnish, which is finally removed as a dry pellicle, no change of the dressing having been necessary.

Should, however, suppuration be indicated by the setting in of fever, or occurring painfulness the dressing is removed from this locality; if the spot is not over 5 centimetres in diameter nothing further is done than to strew the moist surface with dry powdered salicylic acid; if larger, an opening is cut in the dressing, the salicylic acid applied as before and then covered with a fresh layer of cotton. The scars become by this methed entirely smooth, white, and are not hypertrophied.

[Translated for the Therapeutic Gazette from Heidelberg Gazette.]

Diphtheria Treated by Ozone.

Dr. Jochheim has recently published his treatment of this disease by ozone. He obtained the gas from a mixture of equal parts of permanganate potash and of concentrated sulphuric acid. The inhaler is directed against the fauces and tonsils, for three or four minutes at a time, repeating the operation every one or two hours. In small children the mouth is kept open by a piece of cork. He also washes the mouth with diluted sulphuric acid; as adjuvants he also gives an inhalation of common salt and vapor of water.

The diet is chiefly of digestible substances, broths, wines of Bordeaux and of Champagne, good cognac or rum, when to prolong the resisting power of the system. He says all his cases are cured.

[NOTE BY TRANSLATOR.—If such were the fact the large mortality from this disease in Brooklyn, and other places, could soon be stopped; and it

an open question as yet whether the use of sulphur or its preparations locally and internally, has not also effected wonderful cures.

[Translated for the Therapeutic Gazette from the Droguisten Zeitung, Oct. 8, 1880.]

Petroleum as a Medicine.

According to a communication by Dr. Monbré in the "Gazette des Hopitaux," petroleum has been employed medicinally for over a year by Dr. Blache under the name of Gabian Oil or 'Huile de Gabian.' It is administered in the form of capsules of which each contains 25 centigrammes of the purified product, obtained by distillation, over sulphuric acid. In the Beaujon hospital, where they have been distributed free to patients with chronic bronchitis, a rapid decrease in the paroxysms of cough and amount of secretion (?) has resulted from its employment. Even in cases of tuberculosis noteworthy results are said to have been obtained.

[Translated for the Therapeutic Gazette from the Pharmaceutische Post, Oct. 16, 1880.]

Pilocarpin.

Dr. C. Guttman, of Cronstadt, speaks of Pilocarpin as an absolutely certain specific in diphtheritis:

He employs it internally in most cases inconjunction with pepsine, on account of the favorable influence exerted by the latter on the usually existing stomachic catarrh, and also for the sake of the digestive action it exerts on the pseudo membranes generally swallowed by children. The formula employed by him for children is as follows;

℞ Pilocarpin muriat. 0.02—0.04.
Pepsinæ, 0.60—0.80.
Acid hydrochloric (gtt. ij) 0.15.
Aq. dest, 80.0.

M. S. A teaspoonful every hour.

For adults

℞ Pilocarpin muriate. 0.03—0.05.
Pepsini, 2.00.
Acid hydrochloric (gtt. iij.) 0.20.
Aquæ. dest. 240.0.

M. D. S. A tablespoonful every hour.

After each dose a teaspoonful of Hungarian Wine is given; for adults a tablespoonful.

[Translated from the Medicinische Chirurgische Rundschau, October, 1880. From an article, by A. Eddmon.

On Manaca.

This drastic drug which the author has employed since 1867 during his residence in Oannus, on the Amazon, is known by different names such as Gerotuca, Camganba, Manaca des Juso, and chiefly, in Para, as Mercurius vegetabilis. Not only the root, as Hansen states, but also the leaves and stems are used. The plant has a bitter sharp taste causing inclination to vomit, and is one of the strongest purgatives found in Brazil. Eddmon's experience with this drug classes it as an active emeto-cathartic, diaphoretic, diuretic and an effective antisyphilitic. It is said to be employed successfully by the natives as a remedy for snakebite on account of its action on the blood metamorphosis, and has proved itself useful as an alterative in aiding the removal of noxious substances in diseases of the skin and kidneys.

The dose of the powdered root is from 0.3 to 0.6, three to four times a day, or in form of a decoction of 10.0 to 15.0 to 100. After three or four doses the patient usually complains of headache, profuse transpiration and itching of the skin. In Para the green plant is also used externally for indolent ulcers. On account of its frequent employment in affections of the liver and other affections where mercury would otherwise be exhibited, the drug has obtained in S. America the name of Mercurius vegetabilis.

[Translated for the Therapeutic Gazette from Revista de Madrid.]

Stigmata of Maize.

The Cronica Medica of Valencia de Jimeno, has some observations on this plant, first made known by Dr. Bertherand, in 1878. It has proved beneficial in vesical catarrh, dysuria, cystitis and uric lithiasis, producing discharges of small calculi. It is a sedative in nephritic colic and inoffensive in use. He first tried it in a case of renal lithiasis of two years' standing, accompanied with nephritic colic and hematuria and expulsion of red sandy particles. In other similar cases it has also acted well, and even with surprising results in our hands.

[Translated for the Therapeutic Gazette from Paris Medicale.]

Papaina, or Vegetable Ferment, in Chronic Diarrhœa of Children.

Papaina is a digestive ferment, extracted from the Carica Papaya, by Dr. Wurts, which is presented under the form of a white amorphous powder. It contains besides gluten, milk, yellow of egg, muscular meat and fibrine washed like animal pepsine, but more energetic. The papaina possesses the property of transforming into dialized peptones, albuminoid materials, and is applicable in all forms of dyspepsia. It is given in syrup to children with chronic diarrhœas, and in a few days the passages becomes natural and consistent.

[Translated for the Therapeutic Gazette from Revish Medicina, Madrid.]

Fever and Ague Treated with Telerana.

Dr. Lo Feren, contributes an article in the Revisto de Medicina Cirugia Practicus, Madrid No 89, on this disease. In this locality (Guadalajara) one of those epidemics of fever and ague reigned, which disgust medical men, by the severity of the fever, and the uselessness of quinine in all forms, and other specifics for the disease. After vainly trying these medicines I commenced with the teleraña; it gave excellent results, in doses of two and a half grains in pills, taking twenty grains the first day; eight the second; four the third day; and two grains the fourth day.

During the past three years we have found no case of intermittent fever which did not yield to the above treatment.

[Translated for the Therapeutic Gazette from Revista Cientifica Bogota.]

Injections of Milk instead of Blood.

Dr. Duchany has sent to the Academy of Paris, a statement of his experiments with milk. As it is nearly of the same constitution as hu-

man blood, he has drawn from animals a certain quantity of blood and returned the same quantity of milk, but he has noticed that the animals injected did not possess the strength after transfusion as before they were bled.

[Translated from the Le Perdriel Rebouleau.]

The Thapsia Counter-irritant Plaster.

The plaster, a substitute for croton oil and Gondret's pomades, etc., is useful in all cases where a counter-irritant is needed. It is a new and powerful therapeutic agent of graduated strength, producing an artificial irritation of the skin, particularly in affections of the chest, rheumatism, arthritis, bronchitis, etc. Its action is more prompt and lasting, its use less dangerous than its predecessors. It produces erythema, followed by a well developed miliary eruption, proportionate to the length of its application, which takes place without having recourse to heat, the temperature of the body being sufficient to ensure its adherence.

[Translated for the Therapeutic Gazette from Gazetta de Sanidad Militar.]

Papaya in Diphtheria.

Dr. Bouchut, of the Academy of Science of Paris, has experimented with the juice of the papaya procured from incisions, made in the tree of the same name, according fo the Flora of Brazil. The juice is applied locally to the diphtheritic deposit, and dissolves it, and so far as tried, has acted well, and gives good grounds for believing that it will prove a good remedy in this disease.

[Translated for the Therapeutic Gazette from Thesé de Paris.]

Laryngeal Phthisis.

Dr. Basworth, bathes the affected region with warm water and afterwards applies the following solution.

Phenic Acid. (crystals).
Bicarb Soda.
Bichlorate Soda, āā 12 decigramme.
Glycerine 43 1-5 grammes.
Rose water 223 "

Mix.

If astringents are needed he uses a combination of sulph. zinc, tannin, nit. silver and glycerine; but generally prefers.

Morphine. 50 centigr.
Tannin. 7.20 grammes.
Iodoform 21.60 "

[Translated for the Therapeutic Gazette from Archivio Clinico Italiano.]

New Therapeutic Agent in the Treatment of Cancers.

Dr. Kenworth has proposed and practiced successfully a curative method in cancerous and analogous tumors. If true, humanity has been rendered a great benefit, and the treatment has the advantage of being simple and easy applied, consisting solely in applying a current of hot sand. Its immediate effect is to assuage the pain, and the tumor dries up and becomes cicatrized.

Chloride of Zinc in Nasal Polypus.

Dr. Rochard in the name of Dr. Bortholeny, communicates his observations on the cure of naso-pharyngeal polypus by the injection of chloride of zinc. The patient was æt. 14., and in an anæmic state from large nasal hemorrhages. He first injected five drops of liquid chloride of zinc. The result was that in four minutes the polypus was removed. Dr. Anger prefers the chloride of iron.

Asthma Treatment by Alteratives.

Asthma intermittent: Fowler's solution during the intervals, morphine injections during the attack, infusion of digitalis generally. Iodide of potassium is valuable in many cases.

During the attack, expectorants, syr. ipecac, emetics and injections of morphine. Conclusions: 1. In the great majority of cases iod. potas. is excellent, but contraindicated in tuberculous patients; arsenic generally in other cases when iod. pot. fails.

The world does move, as Galileo remarked, and "El Medico y Cirujano Centro Americano" rejoices that public schools have been started in that region and calls upon the medical profession to aid the great work, of trying to elevate humanity, particularly in their branch of knowledge in the natural sciences and in medicine.

Correspondence.

Replies.

Berberis Aquifolium and Potassium Salts.

Why is the fluid extract Berberis Aquifolium incompatible with Potass., Iodide and Bromide? I sometimes wish to join them in the same prescription and find I cannot do so. Please answer and oblige. Yours,

E. C. MARKS, M. D.

WINCHESTER, Tenn.

[Berberis Aquifolium contains besides ordinary vegetable constituents, also an alkaloid (see New Preparations, No. 7, 1879) and one or more resins which, so far, have not been thoroughly investigated. If the fluid extract be mixed with much water and the mixture filtered, the alkaloid will remain dissolved in the filtrate and the solution gives no precipitate on the addition of potassium iodide. The resinous matter, however, which has been precipitated by the water, on re-solution in fifty per cent. alcohol, gives a precipitate with the iodide. The precipitate is not formed, if the liquid be previously made faintly alkaline with caustic potassa. In order, then, to prevent formation of the precipitate occurring on the addition of potassic iodide to the fluid extract, all that is necessary is to previously render the potassic iodide solution slightly alkaline before its addition to the fluid extract. Should a faint turbidity still occur the addition of a few more drops of potassa solution will cause it to disappear at once.—ED. THERAPEUTIC GAZETTE.]

Benzoic Acid Ointment.

W. T. MCMAHON, M. D., Bellville, Ohio.—The following formula for this ointment, by Mr. Godlee, is employed at University College Hospital:

℞ Boracic acid, in fine uowder. 1 part.
White wax, 1 part.
Paraffin, 2 parts.
Almond oil, 2 parts.

Melt the wax, paraffin and oil, with a gentle heat; then add the acid and continue stirring until it remains of uniform consistence. Before using, it should be reduced to a soft mass by rubbing it in a cold mortar.

The New Pharmacopœia and Elixirs.

Having devoted three columns to the Committee of Revision and Publication of the Pharmacopœia of the United States and its alleged action in reference to the introduction of "elixirs" into the forthcoming pharmacopœia, may I ask you to be kind enough to give space in the GAZETTE to the following remarks called out by your editorial:

As to the cause of Dr. Squibb's resignation, it is sufficient to state that it is not known to the Committee.

In reference to the introduction of certain elixirs into the pharmacopœia, permit me to say that no definite action has been taken by the Committee, the whole question having been referred to a special committee, which has not yet reported. Such questions as have been finally settled by the Committee, and the work it has so far completed, are no doubt fair subjects of criticism, notwithstanding the fact that the new parmacopœia as a whole, when ready, must be again passed upon and approved by a majority of the whole committee before it can be considered as adopted under the rules of the Pharmacopœial Convention. Questions, however, which are still under deliberation should, it seems to me, be discussed without prejudging the supposed or alleged opinions of a majority of the Committee—opinions which frequently change when discussion brings out all the points involved. This very question—that of the introduction of any elixirs in the pharmacopœia—ought by all meanss to be discussed in the medical and pharmacal journals, in order that the members of the Committee of Revision may have the benefit of the prevailing opinion of those entitled to pass judgment in the matter, and if the discussion be carried on without reference to what the committee may or may not do, it is altogether probable that individual members would be glad to take part in the discussion.

Concerning your criticism upon the action of the Pharmacopœial Convention in appointing on the Committee of Revision twelve pharmacists and thirteen physicians, it may be said:

1. That Dr. Squibb urged the American Medical Association to take charge of the work, but without success.

2. That the most important duty of the physicians on the Committee, as physicians, is to determine what articles shall be in the pharmacopœia, and what shall be omitted — in respect to which question the pharmacists on the committee simply vote according to their knowledge of the extent to which each article is prescibed by the physicians of their locality.

3. That although each pharmacist engaged in the retail drug business has the opportunity to see what articles are prescribed by a great number of physicians, while each physician rarely has that opportunity, the pharmacists on the Committee of Revision were, of course, willing to be guided by the judgment of the physicians on the committee, rather than by those outside its membership.

4. That the great bulk of the tedious and most laborious work of the committee must of necessity be done, now as ever before and ever hereafter, by pharmacists.

5. That eighteen out of the thirty members of the commission appointed to revise the German Pharmacopœia are pharmacists, pharmacologists and chemists, the remainder being physicians, which fact would seem to show that the Government of Germany—a country where the pharmacists are more fully under the control of the medical profession than in any other country—deemed it necessary that there should be a preponderance of pharmacists on their commission.

And 6. that every member of the Committee of Revision does his share of the labor gratuitously, pays his own expenses in attending meetings of the Committee, and occasionally other expenses incident to his work, and may honestly lay claim to the privilege of not being criticised until his work is presented as accomplished.

As to the "elixirs" as a class of medical preparations, the chief argument in favor of their introduction into the pharmacopœia has been the fact of their extensive use by the medical practitioner. I learn that an inquiry set on foot to ascertain the extent to which elixirs are prescribed by physicians so far, indicates that more than one prescription in every ten calls for some one of that class of preparations. Some of the objections urged by you against the introduction of this class of preparations are readily met, and there are some errors in your argument which might be corrected, but I did not take up the pen to defend the "elixirs," my object being rather to set right the position of the Committee of which I have the honor to be a member.

Very respectfully yours,

OSCAR OLDBERG.

Office Supervising Surgeon-General U. S. Marine-Hospital Service, Washington, D. C., Dec. 10th, 1880.

Robinia Pseudacacia, or Honey Locust.

I read an article in the July No. 1880 of the THERAPEUTIC GAZETTE on "Poisoning by the Bark of the Robinia Pseudacacia." The article was copied from the Pacific Med. and Surg. Journal. "Children, it is stated, were poisoned by the bark of the thorny or honey Locust tree, Robinia Pseudacacia. The honey Locust is not the Robinia Pseudacacia, but Gleditschia triacanthus, L. The reference in the article to Robinia in King's American Dispensary is correct as to the narcotic properties of Robinia, but that is not the honey Locust. I think the writer of the article has confounded names. The sweet pulp found is the black pods between the seeds of the honey locust (whence one of its common names) is eaten freely by children without harm. If the statement as to the "honey Locust" bark be true as stated, it would be well to determine the botanical name, or whether it is a common name misapplied.

TRAILL GREEN, M. D.

EASTON, PA.

The Therapeutic Gazette

WM. BRODIE, M. D.
CARL JUNGK, Ph. D. } Editors.

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Our Exchanges (Continued).

CANADA Medical and Surgical Journal. Published at Montreal, and edited by Drs. George Ross and W. A. Molson. This monthly journal, of sixty-four pages, is such a one as the profession of Quebec owes it to itself liberally to support. Its editorials are always chastely written, and its selections evince an appreciation of the needs of the practitioner. We don't however, like the manner in which it alternates its reading with its colored advertising pages; but this is simply a matter of taste.

Chicago Medical Journal and Examiner. Edited by that Nestor of the profession, Dr. N. S. Davis, who has associated with him Drs. James Nevins Hyde, the dermatologist, and Daniel R. Brower, the neurologist. Years ago there were published in Chicago the Chicago Medical Journal, and the Medical Examiner, each representing, or was supposed to represent, separate interests. In an hour of good will and fraternal feeling these interests were, to an extent, merged, and the journals representing them coalesced, taking the shape of that now before us. So ably has this journal been conducted and so well, consequently, has it succeeded, that the impression has gone abroad that the Chicago profession is a harmonious unit. Of course slight ripples occasionally disturb the placidity, (as for instance a recent article about a uterus which one of the brethren claimed to have "hysterectomized" but which another brother on opening the woman found to be still *in situ*). But little pleasantries like these vary the monotony only, and do not affect the great deep dwelling peace in which the Chicago profession now revels. May brotherly love continue!

Chicago Medical Review. Dr. E. C. Dudley, editor-in-chief, with a goodly corps of associates. This journal, a brief year ago took shape as the Gazette, but in six short months from that beginning was evolved the Review. It was started, like all new journals, to supply a long-felt-want. Judging from the course which the Gazette-Review has pursued, that want was for such a journal as would freely use the probe and the bistoury in the stead of the cataplasm. The Review has brains in its staff, and has neither scissors nor pastepot in its sanctum—all its contents, except contributions, being percolated through the aforesaid editorial brain tissue. It is, in short, a spicy, pungent journal and seems to take.

Country Practitioner, is now midway in its second volume. Published monthly at Beverly, N. J., and edited by Dr. E. P. Townsend. The snap with which Dr. Townsend permeates his little journal makes the paper very readable, and we always look through its pages with pleasure as well as profit. The profession of New Jersey have in the Country Practitioner a journal worthy of their support.

Chemist and Druggist, London, England. This is the leading druggists' trade journal of Great Britain. It contains forty-eight pages of original and selected reading matter, and never less than 100 pages of advertising matter, while in some issues the patronage necessitates as many as 150 pages. It is especially adaped to trade interests, although each number contains much that is valuable from a scientific point of view, while its facteiæ and news items make it in addition to all this a very entertaining periodical.

California Medical Journal. Edited by Drs. Maclean, Bundy, and Crowley, of Oakland, California. This journal is the single exponent of the Eclectic school of practice on the Pacific slope. It is now nearing the close of its first volume, and is apparently a tolerably vigorous youth. It quotes liberally from its contemporaries, irrespective of their views on the action of drugs, and is eclectic in the true signification of the term.

Clinical Record, of St. Louis. This monthly is edited by Dr. W. B. Hazard, and differs from many of our medical contemporaries in that it bears throughout the stamp of its editor's individuality. We like individuality in a medical journal, and have little regard for those which with an owlish display of wisdom are content simply to reflect light emitted from other sources. An editor should be something more than a mere proof-reader. The Clinical Record always has something good and is always welcome.

The Chemist's Journal, of London, England. This journal is especially an exponent of the interests of the pharmacist, and is devoted to his edification. We regret to notice that it considers that those interests would be subserved by general "counter-prescribing," and that it has a department set apart for the assistance of the druggist in this regard. The Journal, however, it is but just to say, does not endorse the principle, but merely considers counter-prescribing necessary as a sort of retaliative measure on physicians for dispensing their own drugs—a sort of carrying the war into Africa, as it were. Its arguments are specious at best, and are not sufficient to convince us that it is proper for druggists, who know nothing of disease, to attempt to treat it, and for no better reason than that those who do know how prefer at the same time to supply the means to that end. Barring its position on this question the Chemist's Journal is warmly to be commended.

Cholagogues.

Notwithstanding the important part played by the the liver not only as a depurative but as a digestive organ, it is still to a greater extent than perhaps any other organ of the body a *terra incognita*, while the knowledge of what drugs excite its secretion is still in its infancy, notwithstanding the fact that since the days of the "father of Midicine" the importance of at times stimulating the flow has been recognized, and drugs have been administered to that end. Even in these latter days of experimental physiology, when holocausts of dumb brutes are vivisected—sacrificed on the altar of science!—there has been but little added to our knowledge of the functions of the liver, or of the drugs which make these functions more active.

Why it is that so comparatively little is definitely known of the liver and bile lies in the fact that the organ itself is hidden from view, and that its secretion is emptied into the intestine, thus making it impossible for us to collect this secretion unless at the expense of such great local and constitutional disturbance as probably affects materially the quantity and nature of the secretion. In the case of the sweat glands, the salivary glands, the kidneys, etc., and even of the stomach, there is no difficulty in collecting the secretion and in noting the effects on it by medicine. In the case of the liver, not only is it more difficult to determine whether a given drug affects the quantity of bile, but this fact once determined, it remains to be decided whether the increase is due to a bile-secreting or a bile-expelling action of the drug.

The most recent and most satisfactory observations on the action of different drugs on the liver are those by Dr. William Rutherford, of the University of Edinburgh. Although it is several years since these experiments were conducted we are advised by a number of inquiries which have been received during the past year, that they are not generally familiar to the profession of this country; we, therefore, venture a synopsis of them, Dr. Rutherford's report being very voluminous:

All experiments were conducted on dogs, the dog being selected, 1, because of the size of its common bile-duct, and, 2, because that its digestion resembles that of man in that when digestion is completed its stomach is emptied, differing in this respect from the rabbit, whose stomach is never empty. All the animals were given a full meal of lean meat at three or four o'clock P. M., and the experiment begun between nine and ten o'clock A. M., of the following day, thus allowing a sufficient time for the food to be completely digested. It was deemed important that the animal be in a fasting condition from the well-know fact that the secretion of bile is accelerated during digestion. The disturbing effect of irregular muscular movements upon the biliary flow was prevented by injection of small doses of curara into the veins. In consequence of the curare palsy artificial respiration was had recourse to and maintained at regular intervals during the experiment. The method of experiment adopted was that of the temporary biliary fistulæ. Through an opening in the linea albea a glass cannula was inserted into the common bile-duct near to its junction with the duodenum, and tied therein. To the end of the cannula projecting from the abdomen a short caoutchouc tube was attached, through which the bile flowed as it was secreted. Great care was taken to keep the temperature normal, by keeping the animal enveloped in cotton wool—a very important point for if the temperature fall several degrees, the liver secretes more slowly. It was determined by preliminary experiments that the curara employed had no effect on either increasing or decreasing the biliary secretion.

The following is a brief statement of the results following the giving of the several drugs named:

Croton Oil. Notwithstanding the statement of Röhrig that this drug should be placed at the head of the list as a cholagogue, Dr. Rutherford decides that its effects on the secretion of bile are so slight as to be unworthy of attention. He concludes that Röhrig must have been led into an error by his method of counting the drops of bile.

Magnesium Sulphate, Sulphate of Manganese, and Castor Oil. So far from increasing the secretion of bile it was found that this salt actually diminishes this secretion.

Ammonium Chloride. This drug has come to be gradually regarded as a cholagogue, and its value as a remedy in congestion of the liver and chronic hepatitis has been generally attributed to such action. Dr. Rutherford's experiments, however, showed that the bile secretion was at first unaffected and afterwards fell.

The results of the experiments with the above drugs revealed the important fact that when a substance stimulates the intestinal glands, but not the liver, hepatic action is depressed and the production of bile lessened. Slight purgation by a purely intestinal irritant scarcely, if at all, depressed the secretion of bile; powerful purgation produced a very marked effect. So much is the liver influenced by irritation of the intestine that when a drug is given whose stimulant action is both on the liver and the intestine, if the dose be such as to unduly irritate the latter the secretion of bile will be correspondingly diminished in quantity. This fact was especially marked in the case of podophyllin.

Resina Podophylli ("Podophyllin") is a very powerful hepatic as well as intestinal stimulant. To be most effectual in its action it must, in view of the fact above pointed out, be given in moderate doses—not sufficiently large to set up severe diarrhœa.

Resina Iridis ("*Irisin*") and *Resina Euonymi* ("*Euonymin*"). Both of these powerful stimulate the liver while they do not powerfully stimulate the intestine of the dog. Although not so powerful as podophyllin, they are to be preferred in many cases to that substance, because of their far milder excitement of the intestine. For not only is the latter in most cases advantageous on its own account, but also because the action on the liver is far less liable to be hampered and diminished by the intestinal stimulation. Dr. Rutherford's experiments on the dog led him, and have led many others, to try the effects of these substances on man, and they are of great value. The average dose of iridin is four grains; of euonymin two grains. In either case two grains of extract hyoscyamus should be added, and taken at bedtime, for without this some per-

sons experience griping. Neither substance produces headache or any sickness. In some persons the above doses of both substances produce a sufficient purgative effect; but in other cases the purgation is insufficient or delayed, and griping is then apt to ensue. The most beneficial result is obtained by following the dose of these remedies by a mild saline aperient, such as Püllna or Carlsbad water, on the following morning, so that the bile secreted during the night may be fully and quickly removed.

Resina Hydrastis ("*Hydrastin.*")—The root of the Hydrastis canadensis is admitted by all to be tonic, and by some it is said to be aperient, cholagogue, diuretic, antiseptic, &c. "It has been employed in dyspepsia and other affections requiring tonic treatment, in jaundice and other functional disorders of the liver, as a laxative in constipation and hæmorrhoids, and as an alterative in various diseases of the mucous membranes, such as catarrh, chronic enteritis, &c. By some it is used as one of the best substitutes for quinia in intermittents." These and other statements regarding it are made by Wood and Bache, who further aver that a "more precise investigation of its physiological and therapeutic properties is necessary before we can venture to decide its place among medicines." Dr. Rutherford's experiments prove it to be a moderately powerful stimulant of the liver and a feeble stimulant of the intestine. Considering also its tonic properties, itseems to be a substance eminently worthy of the attention of the practitioner. The dose is from one to two grains.

Resina Juglandis, ("*Juglandin,*") is an impure resin prepared as above from the root of the butter-nut (Juglans cinerea). Regarding the properties of the bark of the butter-nut, Wood and Bache state that it is a cathartic, operating without pain or irritatation, and resembling rhubarb in the property of evacuating without debilitating the alimentary canal. It was much employed during the late civil war by Dr. Rush and other army physicians. It is especially useful in habitual costiveness and dysentery. Nothing is stated regarding any influence on the liver.

Resina Baptisiæ ("*Baptisin,*") is prepared from the root of the wild indigo (Baptisia tinctoria). The root of this plant is said to be a powerful emetic and cathartic in large, and a mild laxative in small, doses. Stevens, of Pennsylvania, recommends a decoction of the root in epidemic dysentery. It is said to have proved useful in scarlatina, typhus fever, and in that state of the system that attends mortification. The physiological actions of this plant have apparently not been investigated, and it is nowhere stated that it is a cholagogue. The dose of baptisin for a man is from one to five grains. Dr. Rutherford says of it: "Our experiments prove this substance to be, in the dog, a hepatic and also an intestinal stimulant of moderate power. It may possibly be found of service as a hepatic stimulant in cases of torpid liver with a depressed condition of the system tending to gangrene. We commend it to the attention of the physician."

We will continue our synopsis of these interesting and profitable experiments in our next.

Ourselves, Past (1880) and Future (1881.)

THE ceaseless march of time has brought us to the end of another year, to the close of another volume. It is meet, as is also the custom at each mile-stone in the journalistic journey to look back over the road traveled during the last twelve months, and then to indicate the course which it is designed to follow, should life be spared the traveler during the year to come.

Retrospection is always profitable if it be done with a view to planning for the future. He in whose heart is implanted an honest desire to progress will look over the past to detect, if he may, particulars wherein failure, or lack of wished-for success, has been due to his incompetency, inherent or otherwise, rather than to circumstances which, in the nature of things, he could not control. Life is a bundle of experiences, and success depends on the manner in which the lessons which these experiences invariably teach, have been heeded; and what is true of the individual finds no exception in the case the, somewhat more impersonal, journal.

As the conscientious individual in taking a retrospect never fails to discover flaws, so with the medical journalist. The GAZETTE has during the past year had a measure of success meted out to it such as is seldom the fortune of a medical journal to enjoy. In view of drawbacks peculiar to itself, which it is not necessary to enumerate, this success has been a surprise to even ourselves. We recognise the invaluable assistance of our enterprising publisher, who with his characteristic energy has left nothing to be desired in the matter of presenting the journal to the profession, but in addition to this we will be pardoned for believing that the unparalleled success has been, in a measure at least, due to our method of conducting the GAZETTE. In looking over the pages of the volume which is now closing we find that the journal has been to an unusual degree a medium of communication between its readers on questions of a practical nature, and herein is largely the secret of its success. It has been our aim to encourage such communication, and in the coming year we hope to have this feature become still more prominent.

In the matter of new remedies, so-called, the GAZETTE has, we think, given more information than any other journal published, and it is happy to state that such information as it has imparted has usually been from sources most reliable in their nature. This feature of the journal will be continued, and we hope that the last vestige of a fast disappearing suspicion that a journal which gives especial information on the newer additions to the materia medica, is conducted solely in the interests of the drug trade, will, ere another year has been gathered to the past, be banished to the bats and owls.

The original articles which have appeared in the present volume have been very generally characterized by merit, while many of them have been from the pens of gentlemen whom the profession has honored with a high place in its esteem. Arrangements already made promise even

increased excellency in this department in the new year.

In the editorial department, proper, we find that we have done more work than has been done during the past year by any other monthly medical journal published in this country. Of the nature and quality of that work our readers alone must be the judge. This much, however, we can say, that we have been encouraged to continue this department as a prominent feature in the coming volume, and it shall be our ambition to add to its value.

As regards book reviews we have endeavored in all cases to be fair. Our space has forbidden an extended criticism, but we have, we think, in no instance recommended any book which has not merited such recommendation. As we have done in the past in this matter so shall we do in the future.

Our periscopic department will continue to contain such excerpts from contemporaneous journals as have a special bearing on new remedies and therapeutic progress.

In conclusion, while acknowledging our defects and promising our best endeavors toward remedying them, we wish our readers the good old time wish of a Merry Christmas and a Happy New Year. So mote it be.

"Elixir Chloroformi Compositus" *vs.* Chlor-Anodyne.

WE are in receipt of a reprint of an article on Elixir Chloroformi Compositus, by Dr. W. F. McNutt, which recently appeared in the Western Lancet. The elixir is a new one, compounded after a formula by Dr. McNutt, and so highly commended by that gentleman as a substitute for Collis Browne's chlorodyne, as to have induced a number of our exchanges to so far endorse it as to reprint Dr. McNutt's article on the subject. The advantages claimed for this preparation are that it obviates the following objections to chlorodyne—objections, by the way, the validity of which most practitioners will concede: 1. Chlorodyne is very expensive in this country. 2. It is not a perfect mixture, as it separates. 3. It is too concentrated to be safe for general use. 4, And principally, it is a patent medicine, the exact formula for which is unknown.

Experience in its use has demonstrated the great value of such a combination of remedies as is offered by chlorodyne, in a numerous class of painful affections, particularly of the alimentary canal, and the desirability of such a compound as is not objectionable on either pharmaceutical, economical or ethical grounds is manifest. Such a compound has for a number of years been in the market under the name of Chlor-anodyne, and unless the proposed Elixir Chloroformi Compositus is a more eligible preparation, there is no valid reason, in view of the multiplicity of pharmaceutical compounds already in the market, why it should be added to the list. A comparison of the formulæ for these two preparations shows the latest proposed substitute for chlorodyne to be little more than a plagiarism of that of chlor-anodyne which has for years been published to the profession :

Chlor-Anodyne.	Elix. Chlor. Comp.
℞ Morph. mur.	℞ Morph. mur.
Cannab. Ind.	Chloral. hyd.
Chloroformi.	Chloroformi.
Ol. menth, pip.	Tr. cannab. Ind.
Tr. capsici.	Tr. capsici.
Acidi hydrocyan. dil.	Acidi hydrocyan. dil.
Spts. vini. rect.	Spts. menth. pip.
Excipient.	Syr. sassafras co.
Mx.	Mx.

Wherein the standard formula has been departed from the change has not been an improvement, and especially is this the case with regard to hydrocyanic acid, of which the proposed Elixir Chlor. Comp., contains two and a half minims to the dose,—a quantity which is much too large for indiscriminate use. The addition of chloral hydrate is by no means an improvement.

Dr. McNutt's second objection to chlorodyne viz: "that it is not a perfect mixture, as it separates," may moreover, and singularly enough, be urged against the Elixir Chloroformi Compositus which the proposes. If he will but let a bottle of it stand for a few days he will realize that this theoretical formula does not justify all the claims which he makes for it.

Chlor-anodyne has been demonstrated by a number of years of experience in its use to be a very happy combination of the ingredients which enter into its composition, giving to the mixture marked diaphoretic, anodyne, astringent and antispasmodic properties. As a remedy in choleraic seizures, and indeed in all forms of diarrhœa, whether attended by pain or not, it is a remedy of very superior excellence.

Four Hundred and Eighty Pages for $1.00.

IT is the policy of the publisher of the GAZETTE to make its readers sharers in its prosperity. During the year which the present number closes he has furnished an unprecedentedly large amount of reading matter for the subscription price. Three hundred and eighty-four double-column pages of reading matter, royal octavo size, for $1.00 is certainly something never before offered by the publisher of a medical journal. Only the very liberal support which has been accorded the journal could make it possible for so much matter to be given for so little money, in the present instance. This support, in the matter of contributions, has at times during the past year taxed our capacity for accommodating it, obliging us to hold over articles which should have appeared promptly. To relieve us and our contributors from any such embarrassment during the coming volume, our publisher has determined to add eight more pages to each number,—ninety-six pages to the volume,—thus making the GAZETTE for 1881 to contain 480 pages!

We can only say that we are deeply grateful for this valuable aid in our efforts to present to our readers such a journal as shall at once command their respect, merit their pecuniary support, and encourage their contributions from the rich fund of their clinical experience. It is our persistent aim to make of the GAZETTE such a journal as the progressive physician shall find indispensable in his every day work of treating disease. With the increased capacity of the coming volume we feel warranted in requesting that our pages be made still more the medium of reciprocal communication between our readers.

Captain Eads' Ship Railway.

THE Scientific American for November contains two full page illustrations of Captain Eads' proposed railway for transporting ships with their cargo across continents.

Captain Eads claims by his plan to be able to take loaded ships of the largest tonnage from one ocean to the other across the Isthmus of Panama, as readily as can be done by a canal after the Lessep plan, and at a much less cost for engineering construction.

The project is certainly bold and ingenious, but the projector anticipates no serious difficulties in carrying forward his enterprise. The engravings referred to in the Scientific American show the proposed construction of not only the railroad, but the appliances for transferring the ships from the water to the rail.

A feature of the Scientific American which has added very much to the attractiveness and usefulness of the paper during the past year has been the illustrating and describing of leading establishments devoted to different manufacturing industries. More than fifty of the most important industrial establishments of our country have been illustrated, and the processes of the different manufactures described in its columns. The Scientific American has been published for more than thirty-four years by Munn & Co., 37 Park Row, N. Y., and has attained a larger weekly circulation than all similar papers published in the country. The publishers assure the public that they have not printed less than 50,000 copies a week for several months.

Give us Credit, Please.

IMITATION is very subtle flattery, we admit, and yet no one likes to be imitated without having some sort of recognition of the fact that he is the original. Imitation without this recognition savors too much of plagiarism to suit the average editor. We have no objection to the London Chemists Journal's clipping from our editorials, in fact we are rather pleased to have it do so. But when it, with nothing but its scissors, manufactures an "original" article out of the fruit of the labor of our pen, we don't like it so much. It may have been a case of unconscious absorption, but we don't call it by that name in this country. "Render unto Cæsar the things that are Cæsars!"

Frostilla.

A VERY desirable thing, especially during biting cold, or raw and gusty weather, is a preparation which the knight of the razor may apply to the newly mown face to protect it against the inclemency of the outer air. Those who dispense with the services of the colored knight, perhaps more keenly than those who employ him, have felt the desirability of some such application. We have felt this want, and were induced to give "Frostilla," prepared by Mr. Clay W. Holmes, of Elmyra, N. Y., a trial. It has filled the bill to the letter, and we cordially commend it to fellow-sufferers wherever found. Frostilla is said also to be a good thing in chapped hands, and sore lips.

Elixirs and the New Pharmacopœia.

THE communication in another column from Mr. Oscar Oldberg, a member of the Committee on Revision of the new deceminal Pharmacopœia, will be read with interest. It is the first expression from this committee, on the subject of elixirs with which the profession has as yet been favored, unless Dr. Squibb's resignation be considered an expression. We are pleased to learn that such action as has already been taken in the matter is not final. Our remarks, which Mr. Oldberg criticises, were, it seems, made under a mistaken conception of the condition of affairs. It is, we think, the general impression that Dr. Squibb's resignation was prompted by the action of the committee.

Mr. Oldberg's suggestion that the propriety of the introduction of elixirs be discussed, is very timely, and we should like to see it acted on. The subject is, indeed, such a one as demands discussion, and as the committee have expressed a willingness to be influenced in the matter by the wish of the profession, the latter will have only themselves to blame should they let the matter go by default. Let the matter be discussed.

Book Reviews and Notices.

Is Consumption Contagious? And Can it be Transmitted by Means of Food? By Herbert C. Clapp, A. M., M. D., Lecturer on Auscultation and percussion in the Boston University School of Medicine; Physician to the Lung and Heart Department of the College Dispensary. One of the Attendant Physicians o the Massachusetts Homœopathic Hospital. Editor of the "New England Medical Gazet e." Etc. Etc. Boston and Providence: Otis Clapp & Son, 1880.

The subject is discussed under the following heads: Chapter 1st. What we Mean by the Words "Consumption" and "Contagious;" 2d. Historical and Descriptive; 3rd. Contagions Among Cattle; 4th. Reports of Illustrative Cases; 5th. Deductions; 6th. Is it Possible for Tuberculosis to be Transmitted by Means of Food; 7th. The Inoculability of Tubercle. The author states in his introductory that no thoughtful person can read through these seven chapters without being persuaded that there is "something in it," and that to a certain extent at least, and under certain conditions consumption is contagious. He claims that some of the more important practical results to be obtained by a judicious agitation of this subject are the following:

(1). That no person, particularly if young, should be allowed to sleep in the same bed, or even (if it can possibly be prevented) in the same room with a consumptive.

(2). That no person should be allowed to remain for too long a time, in too close or too constant attendance on a consumptive.

(3). That ventilation as perfect as possible, should be secured.

(4). That the most rigid inspection of all the meats that come into our markets, particularly at the slaughter-houses, and of all the cows which furnish us milk, by competent government officials, beyond the temptation of bribes, should be insisted on for the public safety."

In our opinion there is much more fact than fancy in the views expressed by the author, in the little work before us. We have always believed that phthisis is communicable, and our belief is based upon observation and experience for over twenty-five years. That a healthy person might temporarily sleep with a consumptive person, and not become consumptive, we have no doubt, but to be in contact by day as well as night, the healthy person will succumb in time.

We care not if the book be written by one holding opposing therapeutical views to those we entertain, it contains in our opinion, great truths and such that should be heeded, and if a copy of it could be placed in every household, we believe beneficial results would inure to many families, and to the State, by its study. In reference to the subject of animal food, we believe in thorough inspection of the animal while living. How few of those of Jewish faith die from consumption. May not the reason be attributable to their having their meat inspected, and approved by their Rabbis before eating it. We have no hesitation in commending the book to, not only the profession, but also to the public reader, as we believe it enunciates and presents facts worthy of consideration by both.

The Art of Prolonging Life. By Christopher William Hufeland Edited by Erasmus Wilson, M. D., Author of "A System of Human Anatomy," etc., etc. From the last London Edition. 1880. Price, $1.00.
Philadelphia: Lindsay & Blakiston. Detroit: Thorndike Nourse.

The author of the above work was a philosophic physician and professor in the University of Jena. Life, he defines as a vital principal which pervades all nature, and is that by which plants vegetate, by which animals feel and are actuated; but in the highest degree of perfection, sensation and form it appears in man the supreme link of the visible creation.

The subject is treated in three parts, the 1st is somewhat historical, and inquires into the nature of the vital power and the duration of life in general—plants, diversities of it—animal world of the lower grades, and man.

Part second discusses the means which shorten life, and are thus summed up:

1st Everything must shorten it which lessens the sum of the vital power.

2d Everything that takes from the organs of life their duration and render them unfit for use.

3d. Everything that hastens vital consumption.

4th. And everything that prevents restoration.

Part third discusses the means which prolong life. This is summed up in:

1st Guarding against the enemy of life, and those means which shorten it.

2d The knowledge and use of those means which tend to prolong it.

Evidently the author intended his book for the people, but the editor has made it by adopting his work to the modes of thinking and feeling of the present day, one that will also interest the professional reader. It is a book that should be in every domestic library, and should be read by every man and woman, more especially when they assume the marital relations.

Photographic Illustrations of Cataneous Syphilis. By George Henry Fox, A. M., M. D., Clinical Lecturer on Diseases of the Skin, College of Physicians and Surgeons New York; Surgeon to the New York Dispensary, Department of Skin and Malarial Diseases; Member of the New York Dermatological Society, the American Dermatological Association, etc., etc. Forty-eight plates from life, colored by hand. Price, $2.00 per number.
New York: E. B. Treat, 757 Broadway.

We have received three of these parts. Part one embraces illustrations of

Syph. erethematosum (breast).
" " (back).
Pigmentatio, post syph.
Leucoderma " "
Syph. erythematosum.

PART SECOND.

Syph. poulosum lenticulare.
" " miliare.
" " squamosum (breast).
" " " (shoulder).
" papulosum.

PART THIRD.

Syph. papulosum circinatum.
" papulo-squamosum.
" papulo-pastulosum.
" pustulosum.

Each of these parts is provided with suitable text to explain these eruptions, and also gives the views of the author with special reference to points of diagnosis and treatment. In presenting these series of life-like representations, which has been the result of years of labor, and which shall present and constitute a pamorama of cutaneous syphilis, the author has enjoyed facilities which he did not possess when his former work was begun (and which we highly commended) viz.: A larger number and a better class of negatives, together with experience in the selection of those best adapted to reproduction by the peculiar process employed.

To the student of syphilography this work will be valuable, and also to the general practitioner, as the descriptions are so life-like that once seen they cannot well be mistaken for any other eruptive disease. We cordially approve it.

Transactions of the Michigan State Medical Society for the Year 1880. Lansing, Michigan. G. K. Johnson, M. D., President; Geo. E. Ranney, M. D., Recording Secretary. Fifteenth Annual Meeting.

The annual address was given by Dr. Johnson, President. Subject: Heat or Thernic Force. The address is strongly in favor of the use of the Clinical Thermometer and believes that by the study of thermic phenomena by means of the Thermometer a field of great promise will be opened. Our personal experience does not coincide with the enthusiasm of the address, as in our experience mechanical means of diagnosis or prognosis, invariably have terminated in failure and to the detriment of the use of the natural senses.

The proceedings were attended with considerable interest but the papers read, we must confess, were only mediocre. The physical appearance of the transactions is a disgrace, not only to the society, but also to the State of Michigan. Receiving as we do the transactions of the different State Medical Societies, we have received none so poor in typography and paper as this of Michigan. It could

not be on account of a low treasury, for the society has a large balance to its credit. If W. S. George & Co., of Lansing, cannot do a better job than that of which these transactions are a specimen, the secretary should, in the interest of the society and the profession, hereafter have them printed elsewhere.

On the use of the Cold Pack followed by Massage in the treatment of Anæmia. By Mary Putnam Jacobi, M. D., and Victoria A. White, M. D. Price, $1.25.
New York: G. P. Putnam's Sons, 182 Fifth Ave.; Detroit: Thorndike Nourse.

If we gather correctly the theory upon which the cold pack and massage are applied in the treatment of anæmia, it is, that the kidneys fail to eliminate the urea from the blood; that urea causes anæmia, and the cold pack and massage stimulate the kidneys to remove the urea, and hence the patient recovers. Not many years ago there was a class of physicians called Hydropathists who treated all diseases by the cold pack; of course there were some cures, and these depended upon the physical powers of the patient to react. Experience proved the system inadequate, and hence it failed to meet the claims its adherents promised. We fear the same results will follow the system of cure in anæmia, notwithstanding the able manner in which it is presented and its seeming endorsement by so many German authorities. The authors have presented the subject in an agreeable and readable manner, and we trust the profession will give it that attention its merits demand.

Index Catalogue of the Library of the Surgeon General's Office United States Army. Authors and Subjects, Vol 1. A—, Berlenski, with a list of Abbreviations of Titles of Periodicals Annexed Washington Government Printing Office.

The work of preparing this catalogue was commenced in 1873, and through the indefatigable industry and capability of J. S. Billings, M. D, Bvt. Lt. Col. and Surgeon U. S. Army, and other able assistants, 888 pages, embracing from A— to Berlinski, are now issued. It will be remembered that this is the commencement of a catalogue, of a single library, a collection so large and of such a character that there are few subjects in medicine, with regard to which something may not be found in it. We are authorized to say that copies can be had from the government printer for $2.00.

Hand Book of Chemical Physiology and Pathology, with Lectures upon Normal and Abnormal Urine. By Victor Vaughan, M. D., Ph. D. Lecturer on Medical Chemistry, in the University of Michigan; Managing Editor of the Physician and Surgeon. Au hor of "Osteology and Myology of the Domestic Fowl." Charts for the Analysis of Abnormal Urine. Etc., Etc. 3rd. Edition, Revised and Enlarged.

In the April and December numbers. New Preparations for 1879, we had occasion to express our favorable opinion of the above work, and to commend it to the medical profession and students. A number of new subjects have been introduced into this edition and the cuts instead of being separate, have been bound in this, thus making it more complete. It is printed with good type, but the paper and binding look too cheap for such valuable text.

Navy Department Bureau of Medicine and Surgery. Report on Yellow Fever in the U. S. S. Plymouth in 1878-9. Prepared under direction of Philip S. Wales. Surgeon General U. S. Navy.

The yellow fever having appeared in the U. S. S. Plymouth, the Surgeon General, U. S. N. Richard K. Dean, Medical Inspector, Theodore D. Wilson, Naval constructor and J. H. Kidder, Surgeon U. S. Navy were appointed by to examine in extenso every indication or cause of the appearance of the fever, and to recommend the best methods under the circumstances for its removal. The report enters fully into the subject and concludes that "yellow fever is due to a poison which is not developed by the processes of the disease within the human body, but reaches its period of activity outside of the body. As was epigrammatically said by Admiral Dubourdieu, "C'est de navire qui est malade."

Memorial Oration in Honor of Ephraim McDowell, "The Father of Ovariotomy." By Samuel D. Gross, M. D., L. L. D., D. C. L., Oxon. Delivered at Danville, Ky., at the Dedication of the Monument erected to the Memory of Ephraim Mc Dowell, by the Kentucky Medical Society, May 14th., 1879. Published by the Society, Louisville, Xy., J. P. Morton & Co.

The address by Dr. Gross, is simply elegant, and words of ours can neither add to or diminish its beauty or truthfulness. The elegant engraving of McDowell is a frontispiece. The typography, the paper, the binding and the general appearance of the brochure gives great credit to the committee of the Kentucky Medical Society under whose supervision the publication was made. We return our thanks for the copy sent us.

Higher Education of Medical Men, and its Influence on the Profession and the Public. Being the address delivered before the American Academy of Medicine, at its Fifth Annua. meeting, held at Providence, R. I., September 28th., 1880. By F. D. Lente, A. M., M. D., President of the Academy. Published by Direction of the Academy. C. L. Bermingham & Co.

This address has the right tone; although we do not possess a collegiate degree, we sincerely wish we did; every effort to elevate the profession of medicine we cordially endorse. The polite reference to Michigan, as the pioneer in initiating a method for the instruction and licensing of sanitary experts, by means of the State Board of Health, is exceedingly gracious. We are hand in hand with every effort to elevate the standard of preliminary medical education,

Morton's Pocket Series No. 1, Diet for the Sick By J. W. Holland, M. D., Professor of Materia Medica, Therapeutics, etc., in the University of Louisville. Price, 25 cents. Louisville, Ky.: J. P. Morton & Co. Publishers.

This is a very nice little book, and is confined chiefly to giving information as to the proper diet for the sick in the different forms of disease, besides giving the rules for its manufacture. To the student of medicine who has not studied the art of cookery, and also practitioner, it is extremely valuable.

Pamphlets Received.

Malaria and Its Effects. By J. W. Younge, M. D., Fort Wayne, Ind. Second Edition.

Surgical treatment of Naso-Pharyngeal Catarrh. By D. H. Goodwillie, M. D., D. D. S. New York City. Late Clinical Assistant to the Metropolitan Throat Hospital. Permanent Member American Medical Assciatian, etc.. etc. Read before the American Medical Association.

Clinical Observations on the Radical Treatment of Fibroid Tumors of the Womb. By William Goodell, M. D., Extracted from the Transactions of the Medical Society of the State of Pennsylvania for 1880.

Atresia of the Genital Passages of Women. A paper read before the Chicago Medical Society July 19th, 1880. By Edward W. Jenks, M. D., LL. D., Professor of Medical and Surgical Diseases of Women and Clinical Gynæcology in the Chicago Medical College.

The Electric Laryngoscope. By A. Wellington Adams. M. D. editor Rocky Mountain Medical Review, Colorado Springs, Colorado. Reprint from Archives of Laryngology, Vol. 1, No. 3, Sept., 1880.

"Gastrotomy or Gastrostomy." By L. L. Staton, M. D., Tarborough, N. C. Extract from North Carolina Medical Journal, October 1880.

Notes on the Diseases of Women most frequently met in Private Practice. A paper read before the Union Medical Societies of Wayne, Washtenaw and Oakland Counties, Sept. 2d, 1880. Reprint from the Physician and Surgeon, Oct. 1880.

A Plea for Education as a Public Duty. An address delivered at the Annual Commencement of the University of Michigan June 27th, 1878, by G. V. N. Lothrop, LL. D.

The Higher Education. A plea for making it accessible to all. An address delivered at the Annual Commencement of the Univetsity of Michigan, June 26th, 1879, by James B. Angell. LL. D., President of the University.

Complete Education. An address delivered at the Annual Commencement of the University of Michigan July 1st, 1880, by Rt. Rev. Samuel S. Harris, D. D., LL. D., Bishop of Michigan.

The Symptoms of Sexual Exhaustion (Sexual Neurasthenia) By George M. Beard, A. M. M. D., Fellow of the New York Academy of Medicine; V. P. of the American Academy of Medicine; Member of the American Neurological Society, etc., etc. Reprint from the Independent Practitioner May and June 1880.

Transactions of the Stroud Natural History and Philosophical Society for 1876-7-8. Lansdown Stroud, England, 1880. Compliments of Thomas Partridge, (member of King & Queen's College Physicians, Dublin). Medical Officer of Health. M. R. H. L. L. D., and Honorary Sec'y. Part First.

Annual Report of the Supervising Surgeon-General. of the Marine Hospital Service of the U. S., for the Fiscal Yeer 1880. Treasury Department, Washington, D. C.

American Society of Civil Engineers, Practical Consequences of Variation of Best Section of Rivers Under General and Special Conditions. By Robert E. McLeath, U. S. C. E. Member of the Society, and read at the Twelfth Annual Convention, May 25th., 1880. St. Louis, Mo. With Illustrations.

New Remedies.

ALSTONIA CONSTRICTA—BARK OF THE AUSTRALIAN FEVER TREE.—I have used this agent extensively during the past eighteen months. By prescribing it in hundreds of cases, testing it personally, and observing the results, the following conclusions are deduced:

Alstonia constricta has a wide range of application and action as a medicine. Its action resembles in many respects, the combined action of quinine and nux vomica. It is an antiperiodic of the highest type, giving better satisfaction, to my mind, than quinine or cinchonidia. It is a cerebro-spinal stimulant and tonic, acts positively upon the great sympathetic nerve centers, and consequently increases positively and permanently the vital forces of the entire system. In a large majority of the cases of intermittent and remittent fevers it is a superior remedy. I prepare the system for its use by the administration of the proper sedative, then alstonia seldom fails. Where quinine fails in chronic cases, alstonia often effects a speedy cure.

In typhoid, synochal and puerperal fevers, where an antiseptic and nerve tonic is demanded, it answers well. I used it in the treatment of about seventy-five such cases last fall, and with the happiest of results.

A case: Patient complains of being tired, exhausted, no life, impaired appetite, constipated, headache, restless at night, rises unrested, feels cross and irritable, tongue slightly pale, furred, and quivering when protruded; at times feels feverish and aches all over. With such indications, which betray a general depression of the nervo-vital forces, alstonia acts like a charm.

Under its influence, in one or two-grain doses, every two to four hours, the whole system is soon invigorated; the brain becomes clearer, *i. e.*, acts with more energy and accuracy; the heart acts with more vigor, filling and warming the extremities with more blood; the eye scintillates with an augmented brilliancy, and, in short, the whole being seems to be renewed and endowed with new power and vigor.

While this agent does not act as a cathartic, it increases the secretions and excretions of the intestinal canal. Where stomachic and intestinal indigestion with constipation exist, it improves digestion, slightly softens the feces, increasing them in quantity, and prompts to go to stool.

In recent colds or coryza, it is an excellent remedy. At the beginning of an attack of this annoying trouble, two-grain doses every two hours give prompt relief. The whole system is soon re-invigorated, the secretions and excretions which have been more or less suppressed, are re-established and the patient is all right and feels well. Without such aid the cold often hangs on for days and even weeks—in other words, the vital forces remain depressed, and the patient feels mean and weak.

In the treatment of rheumatism, acute and chronic, I have obtained good results from its use. In acute cases the temperature was reduced by the use of the proper sedative before I administered alstonia.

I use the dusted powder of the bark, and administer it in one of three forms, sometimes one way and sometimes another:

1. The powder in proper size doses. 2. In suspension—in syrup or glycerine. 3. Made into tincture with whisky or brandy. I frequently give it in the latter form in the last stages of typhoid.

The dose, usually, is from one-half to two grains every one to four hours. But in inveterate cases of periodicity I give as much as six-grain doses with good results. If the dose be too large, headache will be produced, with nervousness.

In writing this article I have only aimed to give a brief outline of indications and conditions, and the range of action of this efficient and valuable drug. I trust others will try it and report results. Remembering its range and direction of action, its antiseptic, anti-periodic, stimulant and tonic properties, thus constituting it a powerful conservator of life, and thus prescribing it, I believe it will become a favorite with all who test it.—Dr. A. W. Bixby, in *American Medical Journal.*

THE SILK OF THE CORNSTALK IN THE TREATMENT OF AFFECTIONS OF THE BLADDER.—By Dr. Dassum. —*L'Union Médicale*, April 6, 1880.)

Since the first article published in this journal (*L'Union Médicale*) numerous observations have been published, which clearly show the value of this article in some of the affections of the bladder. We extract the following from the published reports :

Report of Dr. Dezotteux:—Retention of urine by a man of 70 years. The catheter was used the first evening and the following; the syrup of the stigma of maize, given in teaspoonful doses every four hours and the next morning the urine passed normally. The syrup was continued for some days, and cure was complete.

Ibid. Cystitis, dysuria. Urine ammoniacal in a man 58 years. Three doses of the syrup produced a marked improvement, and eight days effected complete relief.

Report of Dr. Lamy: Retention of urine dating ten years in a man of 78, who was accustomed to catheterise himself. One evening after a full supper, he could not pass the sound, and finding himself bleeding considerably, Dr. Lamy was called, who succeeded, after great difficulty in withdrawing the urine. For fifteen days the urine was was withdrawn by means of the catheter. It had a strong ammoniacal odor, and exhibited morbid deposits. The bladder was washed with carbolized solutions every day. Alkaline drinks were administered and inunctions of belladonna and gelsemium practiced, but all without result. The infusion* of the cornstalk was then administered. From the second day the urine was passed normally and the infusion having been continued for a few days, the retention of ten years disappeared.

Ibid. Retention of urine for twenty years in a man of 83 who had used the catheter daily. In using the catheter, violent tenesmus occurred and blood followed. Dr. L. administered the infusion of stigma of maize, and after the third dose the tenesmus ceased. During the night the uriue was passed, quite colored with blood. The next day the blood had disappeared, and permanent relief followed.

Report of Dr. André: A man, 42 years, has suffered ten years from chronic cystitis, a sequel of gleet. During this time he has complained of pains in the lower part of the abdomen, and burning sensations when passing water, and a bearing down sensation of the rectum and perineum. The urine deposited mucus and uric acid. During the the last three years there has existed a constant and imperative desire to urinate. The urine soon became ammoniacal, and finally it passed involuntarily. The classic treatment employed during the ten years was without result. The syrup in question was administered; no other medication. Eight days after, he went to the doctor's office completely relieved.

Dr. Dassum adds that the best mode of administering it, is in the form of syrup made from the extract; three tablespoonfuls during the day in water. The syrup represents twenty-seven grammes of the extract to the liter.

The value of the silk seems to differ according to the way it which it has been collected or dried.

*Fifteen grammes in 500 c. c. of water during the day.

Note.—The French journals have published a good deal of late about the value of the corn silk, but no definite investigation seems to have been made of the active principle.—*Chicago Medical Journal and Examiner.*

KAVA-KAVA IN PAINFUL MICTURITION.—Dr. W. J. Holman, of Polo, Iowa, reports the followlng experience in the use of Kava-Kava, in the Medical and Surgical Reporter:

Not having seen any article in the Reporter on the effects of Kava-Kava in painful micturition, I will, if permitted, report a few cases. About one year ago I commenced to use the fluid extract, rather cautiously at first, but finally prescribing it in all cases, regardless of cause where there was pain, no matter of what character, while voiding urine.

Case 1.—Charles P., six years of age, had been treated for acute cystitis by an irregular physician until the patient seemed well, with the exception of only a slight smarting or burning sensation while voiding urine. A few days after the doctor had dismissed the case, I was called to see the patient, and found him suffering greatly, being unable to make water without screaming fearfully; fluid extract of kava-kava, dose eight drops in two tablespoonfuls of cold water, to be given every three hours until relieved. The first dose gave some relief, and the second brought perfect ease. The medicine was then to be given only three times a day, same size dose. After four days, there being no further difficulty, the medicine was discontinued.

Case 2.—George S., fifty years of age, had ague, and on each chill day, commencing with chill and continuing through it, he had great pain voiding urine. The paroxysm of pain generally continued, though diminishing in severity, up to within a few hours of the commencement of each chill. Doses of twenty-five drops each, until four doses, three hours apart, were given, completely removed all difficulty.

Case 3.—Mrs. R. B., twenty years of age, pregnant, sixth month, painful micturition, entirely relieved by fifteen drops, three times daily.

Case 4.—H. S., seventy-eight years of age, had been exposed to cold draughts of air while perspiring freely, was suddenly seized with a chill, followed by fever and inability to make water, only in a very small quantity, attended with severe pain; there was also tenderness over the region of the bladder. In order to test the virtues of kava-kava still further, I prescribed nothing else. Twenty-five drops in one half tumbler of cold water, two hours apart, removed all difficulty within twelve hours.

Case 5.—John T., twenty-one years of age, second stage of gonorrhœa; prescribed arg. nit., gr. one-half, aqua, four ounces used as injection, and fluid extract kava-kava, twenty drops, three times a day; a cure was effected in six days.

The fluid extract should always be given largely diluted with cold water. I do not think that it is a diuretic, but that it acts directly on the mucous membrane of the bladder and urethra, allaying irritation, and relieving spasmodic contraction of the neck of the bladder.

RECTAL ALIMENTATION.—The absorbent power of the mucous membrane of the lower intestine has long been recognized both in the use of nutrients and medicines, but recently a fresh impulse has been given to this mode of treatment by articles which have appeared from time to time in the medical press. Although the rectum is inferior to the stomach as an absorbing surface, yet its power of appropriation and absorption is of great importance when from any cause the stomach is unable to perform its ordinary function. Medicines of a decidedly unpalatable nature such as turpentine, assafœtida, etc., are not unfrequently administered by the rectum, and especially so when there is any marked degree of irritability of the stomach, and such remedies have been found to produce the desired result almost as effectively as when administered in the ordinary way. Notwithstanding these facts the subject of rectal alimentation and medication has up to the present time, been considered a matter of merely secondary importance, and in many instances overlooked or neglected altogether. In the recent discussion on this subject, such as occurred in the New York Academy of Medicine last year, most valuable information in regard to rectal alimentation in its general application was elicited. In a paper by Dr. Austin Flint will be found a large number of cases in which the efficiency of this method was shown, leading to the assumption that "life may be sustained indefinitely solely by rectal introduction of aliments." Nutrition was maintained in a number of patients from three weeks to five years. the majority of them by rectal alimentation alone, In the present day the antiphlogistic treatment is almost obsolete. Most, if not all diseases, are being treated by the supporting plan; even in surgery the value of generous alimentation is fully recognized, and was ably advocated by Prof. Hamilton of New York, a short time ago. The principle being established, it remains therefore only to show how the object can be best attained. Of course the most natural means, if adequate, is always the best, but if from any irremovable cause the function of the stomach is practically suspended, rectal alimentation is clearly indicated. The materials usually employed are milk, raw eggs, animal broths, etc., but since the publication of Prof. Leube's paper on rectal alimentation in 1872, the preparation he recommended has come largely into use, viz.: muscle of beef partly digested by an artificial process, and brought to a sufficiently fluid condition to be administered by means of a syringe. Quite recently desiccated blood has been brought under the notice of the profession as a new article for rectal alimentation. Some years ago the drinking of bullocks' blood at the abattoirs in New York and other places was indulged in as a cure for consumption and other wasting diseases, and not without benefit to the patients, but naturally enough it was disgusting to most persons. Transfusion has also had its day, and now we have the much more rational, agreeable, and practical method of introducing blood into the system by the rectum, suggested to us. This new method of treatment is no doubt worthy of trial, and the pharmaceutical chemists, especially Parke, Davis & Co., of Detroit, are prepared to supply it to the profession. The blood is first defibrinated, which does not destroy its nutritive properties, and afterwards dried with the greatest care. Blood thus prepared and dried is completely soluble in water below the temperature of 160° F., and contain, all the elements of blood except water and fibrin. When required for use, it is dissolved in water in the proportion of one drachm of the powder to one ounce of water. The dose is from four to six drachms, which may be given at once or in divided doses during the day, as circumstances seem to require.—*Canada Lancet.*

TREATMENT OF DYSPEPSIA.—M. Damaschino defines dyspepsia as a morbid state characterised by slowness and difficulty of digestion. This definition, so uniquely symptomatic, is very accurate, for dyspepsia is only really a symptom either during the evolution of a gastric affection, or in the course of or subsequent to a general malady. The etiology of dyspepsia is very varied, for age, sex, temperament, habit, and certain diatheses exercise a marked influence upon the development and course of the digestive trouble. In this way the varied symptomatic forms which are observed in this pathological condition are explicable, as well as the inefficacy of the most rational methods of treatment which is so often noticed. Amongst the numerous remedies for dyspepsia, the digestive ferments, and of these more especially pepsin, occupy the foremost place. To enable these remedies to act with certainty they ought to approximate as closely as possible to the conditions under which they act in the natural state; by the union of pepsin with hydrochloric acid a very soluble digestive ferment is obtained, which is found to possess an exceedingly energetic action; in combination with pancreatin, coca, and bitters, which increases its eupeptic action, it forms the basis of the elixir of Grez. This preparation acts not only by its own digestive properties, but also by stimulating the secretion of the gastric juice, so that it is also a peptogen. A great number of experiments have been conducted in the French hospitals, in regard to the use of this elixir in the treatment of intractable cases of dyspepsia, with the result that there has been a rapid improvement of the general condition, with a complete remission of all the symptoms, pains, gastric meteorism, eructations and vomiting. Affections connected with stomachal vertigo, and migraine arising from functional impairment, have been rapidly cured. Digestive troubles also, which are so frequent in adults, and more especially at puberty, as well as in chloro-anæmia, have invariably yielded to the influences of this remedy. Phthisis is nearly always complicated with dyspepsia, often in the form of obstinate vomiting, which rapidly aggravates the condition of the patient; in such cases the elixir has afforded the most excellent results by curing the vomiting and altering the state of the alimentary canal. Rheumatic and gouty patients, who for a long time previously had digested with difficulty, have recovered their digestive functions after a few days of this treatment. Lastly, this elixir has been employed at the Children's Hospital in numerous cases of chronic diarrhœa and vomiting with the very best results, and it has even been used with success in that most severe and dangerous of the affections to which children are exposed,—infantile cholera. —(*Le Progrès médical*, May 15, 1880.)

ONOSMODIUM VIRGINIANA.—Under the local name of "Gravel Weed" the laity in Middle Tennessee have, for many years, used this plant as a remedy for urinary troubles. Their use of it was, of course, empirical. Regarding every case in which there was frequent or painful urination, as a case of "gravel," the "gravel weed" was used freely in decoction for its relief. This I knew to relieve so promptly and effectually in so many cases that I determined to test its virtues. Accordingly I secured a supply and used it under its common name, as I knew no other until recently. I sent a specimen to Mr. A. M. Lloyd, botanist, of Cincinnati, who identified it as Onosmodium Virg., and gave other common or local names, as Job's Tears, False Gromwell, etc,

Having by experiment determined for myself that it was diuretic, I decided to take the indication for its use relied on by the laity—vesical tenesmus—"gravel," as they called it.

Taking frequent and painful or urgent urination as the indication for its use, after excluding such cases as depended upon mechanical causes, I gave the decoction quite often and with such beneficial results as to impress me quite favorably, notwithstanding a number ot cases failed to be benefited by it. These I found to be cases in which there was excess of acid in the urine, and when the urine was rendered neutral by alkalies, or other treatment for indigestion, these, too, were benefited.

After using the decoction in a great many cases, and becoming thoroughly satisfied of its great value in irritative troubles of the bladder, I, for greater convenience, prepared a tincture from the freshly-dried leaves, which I have found to act as well as the decoction. This may be given in quantities ranging from ɪ ʒ to ɪ ℥ in 24 hours.

King, in his American Dispensatory, speaks of the production of excessive diuresis by the decoction of the root and the seeds (the parts, he says, used in medicine), but I have not found excessive urination to result the use of from the leaves either in decoction or tincture; it might; however, do so if given in very large quantities.

I have found Onosmodium the most reliable remedy I have ever tried for cystitis, either acute or chronic. In gonorrhœal cystitis Onosmodium with plenty of water and good hygiene, is all that is required except where the urine is too acid.

Onosmodium seems to produce its soothing effect on the vesicle mucous membrane independent of its diuretic action, for I have often derived the best results from doses too small to produce any perceptible diuretic effect (¼ ʒ three or even six hours apart.)—*Dr. D. H. Dungan, in Arkansas Medical Monthly.*

HOMATROPIA, A NEW MYDRIATIC.—The appearance of an article under the above caption, in the Times for October 9, has naturally aroused the inquiry, "What is it?" In response, I would say that homatropin is a derivative of atropin, and is so named because of the similarity of its properties to those of the latter drug.

Homatropin was discovered by Professor A. Ladenburg, of Kiel, in the course of some experiments upon the synthesis of atropin. He has so far succeeded in this purpose as to be able to recombine the primary products of the decomposition of the natural alkaloid. By the action of baryta and hydrochloric acid atropia is split into tropin and tropic acid, as follows:

$C_{17}H_{23}NO_3 + H_2O = C_8H_{15}NO + C_9H_{10}O_3$.

Atropia + water = tropine + tropic acid.

In the course of investigations as to the possibility of making tropine and tropic acid artificially, he discovered that the former, under the action of strong hydrochloric acid and other conditions, is converted into a new base, which he call tropidine—$C_8H_{13}N$. It is of an oily consistency, and has no effect on the pupil.

A number of new bases, called tropeines, have been obtained by warming tropine with organic acids and diluted hydrochloric acid. The only one of these which seems to possess special interest is homatropin, or oxytoluyl tropeine. It is prepared from tropine, amygdalic and dilute hydrochloric acids. Merck states transparent, colorless, regular crystals. These are hygroscopic, and, at the same time, do not readily dissolve in water.

The hydrobromate, on the contrary, forms a salt which is not hygroscopic, but which is soluble in ten parts of water, and the solution keeps well. Merck, of Darmstadt, has undertaken the manufacture of homatropin hydrobromate on a large scale. It will, no doubt, be extensively used as its properties become widely known. I find it convenient to rely upon it exclusively in refraction cases in my consulting rooms.—*Dr. H. S. Schell, in Phil. Med. Times.*

THE MIKANIA GUACO AS A REMEDY FOR SNAKE BITE.—In South America, under the name of "guaco," several plants enjoy a considerable reputation as remedies against snake bites. Most of them are species of Aristolochia, but one, the Mikania Guaco, is a composite, plant. Notwithstanding this reputation, very little trustworthy evidence has been published as to the real efficacy of any of them, and an attempt made by Dr. Schomburk a few years since to introduce the Mikania Guaco into South Australia, with a view of clearing up the doubt, does not appear to have led to a definite result. In a letter, however, recently received by the Director of the Royal Gardens at Kew, from Mr. Robert B. White, of La Salada, New Grenada, the writer gives his personal testimony as to the value of the remedy, and some other information which, by the courtesy of Mr. Thiselton Dyer, are made available for the readers of this Jonrnal.

Mr. White says that the Mikania Guaco is the true "guaco," and forms the basis of all the preparations of the snake bite doctors of the district. There are two varieties, one with green stems, the other, called "morado," with purple, the latter being the most prized. There are several species of snakes in the country whose bite is deemed mortal, some of them killing in a very few hours, but Mr. White, who has lived in the Choco and other snake-infested regions many years, testifies that the guaco, properly and promptly administered, is a cure for the bite of the most venomous.

In cases of snake bite, when the guaco leaves can be obtained fresh an infusion in sugar water is made, in the proportion of one leaf to a large cupful, and this quantity is given hot every hour. It is said to stop the vomiting usually occurring. The leaves are also preserved by bruising and

placing them in alcohol, and of the tincture thus formed a teaspoonful is administered every half hour for one hour and a half, and then every hour, and afterwards the dose is gradually diminished. Hot poultices of the bruised leaves and stem of the plant are applied to the wound, taking care not to use sufficient heat to drive off the volatile principle of the plant. If there be swelling and pain the limb is fomented with hot water to which some tincture of guaco has been added.

The Mikania Guaco is described as growing from seed in any good soil where there is a temperature of 24° to 25° C., and it would appear to be a plant deserving of physiological and chemical experiments to determine its true character. It is worthy of note that it was at one time said to be the source of condurango.

Quinamine.—Again the medical world has been presented with a new conception called Quinamine, said to be uncrystallizable quinia, and comprising other valuable constituents of Peruvian bark. When will this diabolism cease, and when will the traffickers in new remedyism ever let up in their schemes of crowding into the van their tiresome innovations, and endeavoring to compel physicians to prescribe and use their silly and useless nostrums? It is remarkable what untiring elasticity and inexhaustible scope some well-known and favorite drugs possess, and especially it is the case of cinchona bark. Since its introduction as a curative agent its natural features and general characteristics have been contorted into numberless and nameless shapes, with a product of fantastic alkaloids, peculiar approximations, and other active principles, until the individual notation would make a list as prolific as the tail of a comet. We have quinidia, cinchonidia, quinamina, apoquinamia, quinamidia, quinamicia, monoquinamicia, monocinchonidia, and all the twisted idioms of our extensive tongue have savored this boundless and seeming inexhaustible dish of unrelishable dialect. And now another has displayed and unfurled its feelers for patronage in this principle called Quinamine, claiming to embody all the virtues of Peruvian bark, and at an alarming low value. We trust that physicians will resent and disfavor this classic procession of meaningless remedies and give no encouragement to the missionaries sent out for their introduction; for it is through the medium of our medical men that we shall thwart the bombardment of these damaging delusions.—*Western Lancet.*

Citrate of Caffein as a Diuretic.—An interesting series of articles, in the April, June and July numbers of the *Practitioner*, by Dr. D. J. Leech, convey an accurate idea of the value of this drug, as proved by a large number of carefully-noted observations. Twenty cases are fully recorded, to give an abstract of which is, of course, undesirable; but the general conclusion at which Dr. Leech arrives is, that caffein will often produce diuresis, when other potent drugs have failed, although, at times, other drugs succeed when caffein has failed. The diuretic effects of caffein seem to depend partly on the influence it exerts over the general circulation, partly on its specific action on the kidneys. It has little influence on the vagus, but it directly stimulates the heart, and increases blood-pressure; the influence on the blood-pressure depends upon the dose, and hence the variety of opinions held upon this subject. A large dose may lessen the pressure, and thus tend to reduce, rather than increase, the flow of urine. Too small a dose equally fails in promoting diuresis, since it does not sufficiently stimulate the circulation. In one case nine grains daily failed, while twenty acted powerfully; and, in another, the result was exactly the reverse. The condition of the heart walls has important bearings upon the action of caffein. (Dr. Berkart, in the *British Medical Journal*, July, 1880, p. 80, utters a warning when using caffein, on account of the peculiar rigidity it causes in the cardiac muscles.) The success of caffein, as a diuretic, is interfered with by two causes. One is the readiness with which the system becomes accustomed to its use, and then, like opium, it ceases to have its accustomed effects; the other is the variable action which caffein produces, owing to idiosyncracy. Caffein may be given in coffee; it is a tonic and stimulant diuretic, and quick in its action. It sometimes causes nausea and headache; palpitations are at times induced. It will occasionally succeed when digitalis fails. In ascites and anasarca it is well worthy of further trial; in cardiac dropsy its utility is placed beyond all doubt.—*Lond. Med. Rec.*

Singular Effects of Nitro-Glycerine.—A correspondent of the British Medical Journal gave, in the case of a lady suffering with cramps in the stomach, something less than a drop of a one per cent. alcoholic solution of nitro-glycerine. In two minutes the pulse fell from 140 to 50, a clammy sweat covered the patient's features, and she became senseless. Stimulants to the nose and brandy were quickly given, and in about three minutes more she began to recover. The pain was completely gone, and did not return all that night or the following day. The patient said she felt like two people, and so strong was this impression that, though perfectly rational in her conversations and unexcited in her manner, she could not shake it off, but frequently checked herself when about to make allusion to her imaginary double.—*Druggists Circular and Chemical Gazette.*

Robson on the Uses of Nitro-Glycerine.—In The British Medical Journal, April 1880, p. 556, Mr. A. W. Mayo Robson confirms the value of nitro-glycerine in cases of migraine, angina pectoris, and asthma, one severe case of this latter disease being most remarkably cured by the drug. [Soon after the powers of nitro-glycerine were brought before the profession by Mr. Field in the Medical Times and Gazette, 1858 and 1859, the marvellous powers which the drug possesses of relieving the spasm of asthma were fully tested by the reporter among patients living in the malarious climate of Java, where the disease is very common. Frequently the tongue of the patient was touched with the stopper of a bottle containing a 5 per cent. solution, when the paroxysm was so severe as to cause consternation to all around, and in less than a minute there was a great calm; the patient especially if a superstitious Chinaman or Malay, believing himself to be the subject of a miracle.—*Rep.*]

Therapeutic Progress.

OZONE—A PRACTICAL PAPER.—Professor Oscar Liebreich delivered an address on this subject at the second annual meeting of the Balneological section of the Medical Society of Berlin (*Deutsche Medicinische Wochenschrift*, June 12, 1880.) At a former meeting Dr. Liebreich stated the opinion that certain substances, known and unknown, play a large part in the action of natural mineral waters, although present only in small quantities; but that it must not be conversely concluded that all such substances have great importance. We know that ozone had originally a very hard time as a chemical substance; chemists first of all denied its existence, and, later on, under-valued it. It first obtained its due place among chemical substances by the experimental researches of Schönbein and his followers. The fate of ozone in chemistry will probably not be repeated in therapeutics, as we have here to deal with a substance which is already well known beforehand, and we know the action which ozone can exert on the organism. We possess a substance which is extraordinarily like ozone in the per oxide of hydrogen, which formerly belonged to those substances that although described and brought forward in books and learned societies, were rarely seen and then only by a few learned persons. We have not to thank any scientific efforts that it has now become a matter of general knowledge, but only researches for cosmetic purposes.

Peroxide of hydrogen was first manufactured on a large scale for the purpose of dyeing dark hair yellow, and through this technical application it has become possible to experiment with this substance in large quantities. We know that it possesses quite opposite and peculiar properties, both of conservation and of destruction. Liebreich has on another occasion stated that milk can, for example, be preserved for a long time with peroxide of hydrogen, without undergoing putrefaction, and that on the other hand, blood immediately decomposes peroxide of hydrogen. When peroxide of hydrogen is put into a wine glass, and a teaspoonful of blood is added, it foams like champagne, not with carbonic acid gas, but merely with oxygen. It was naturally an easy step to repeat this result on the animal organism. Liebreich accordingly entrusted Dr. Schwerin with this research; and Dr. Guttmann at the same time undertook independently a similar investigation, when the remarkably interesting result was attained, that the decomposition is affected in the same manner in the animal organism as outside the body.

This is one of the most surprising pharmacological experiments that can be made. When peroxide of hydrogen is injected into a dog, the decomposition actually takes place in the subcutaneous connective tissue and the animal is correspondingly distended at these places; a local emphysema is excited by the giving off of the combined oxygen. In small quantities this result only is attained, and no general effects are produced. When, however, considerable quantities are continuously injected into the animal, certain quantities of the peroxide of hydrogen are absorbed. It might be anticipated that, when a substanc is injected which supplies oxygen to the blood, the animal would find itself in the very excited condition which is observed when an animal is introduced into an atmosphere of oxygen. It is, however, characteristic in all the processes of nutrition that substances are not in themselves advantageous to the organism, except in their right places; and thus we see this vital gas, when introduced by a substance which is absorbed from the tissues of the body, become a poison to the organism, the amimal falls dead, and when a *post mortem* examination is made, it is found on dissection that the veins are bright red, and, above all, in the blood are distributed bubbles of oxygen. The blood does not take up the oxygen; it has indeed been absorbed there and then on the spot, but a coagulation of blood is produced by the breaking up of the peroxide of hydrogen, which supplies more oxygen than is needed; the blood-vessels are obstructed, and the animal dies with coagulation of the blood, suffocated, while possessing an excess of the oxygen, which, if taken in by the lungs, would have been effective in the opposite direction. Thus, then, it is seen that peroxide of hydrogen and the oxygen produced by it internally are of no advantage to the animal. By these researches, the hopes that have been entertained of the therapeutic value of peroxide of hydrogen are annihilated. It is not possible to introduce into the organism any useful supply of oxygen by the internal administration of this substance, so rich in that life-giving gas. The same holds good with ozone, with the difference, however, that the latter, when it has been employed up to the present time has not been experimentally tested, and that therapeutic records supply statements which are directly opposed to the scientifically investigated phenomena.

The first error began with the fact that people are in the habit of speaking in general terms of the contents of ozone, and that various balneologists speak of an atmosphere rich in ozone. We do not know what is meant by rich in ozone or poor in ozone, since we cannot measure it; and in such a phraseology desires appear to be confounded with powers. We know that ozone behaves itself just like other oxidizing substances; iodide of potassium, as is generally known, can be mixed with starch, and in this way white iodized starch paste be produced; when blotting paper is impregnated with this we obtain a white reactive paper, and when this is moistened with an oxidizing solution, whether it be of chlorine or of nitrous acid, or any other oxidizing solution, iodine is set free, and it is known that the starch is colored blue by the combination of the particles of iodine and starch; all oxidizing substances produce these appearances, and this is an elementary experiment which every beginner can make in the laboratory. Of what importance is it when, from the top of some public building in any city, ozone paper is hung out, and its degree of blueness is observed? For this nothing more is necessary than that from some factory chimney chlorine is given out, and the city rejoices in the considerable quantity of ozone which its atmosphere contains. Liebreich insists that general measurements, in places where the composition of the atmosphere is not accurately known, are entirely unreliable.

Another circumstance to which he refers is the use of a scale. When one speaks of a color scale, it is implied that something exact is referred to; but if this iodized starch paper be made of various strength, 1 per 1,000, 1½ per 1,000, and ¾ per 1,000, and then hung along side of each other, then naturally that paper is most highly colored which contains most iodine, and great stress has been laid on these various gradations; but here again no stress is laid upon the rapidity of the movement of the air and the pressure of the atmosphere. This iodized starch paper, when hung out in a still atmosphere, may be subjected to an atmosphere very rich in ozone, and yet the paper be but very slightly colored blue; when, on the other hand, there is a rapid movement of the air sweeping over a paper, although the air may have a much smaller amount of ozone, the paper will nevertheless become much more intensely blue. From the blue color obtained under such circumstances, no practical result can be deduced. No value can be attached to any observations unless it is known how much air in a given time has passed over the paper.

Another question is this: Can ozone exercise any therapeutic effect? This question, in the sense in which it is now put forward, is one which must be answered in the negative. Ozone occupies the same space according to volume, as oxygen gas. Thus, when a physician says to himself, "I have a given quantity of air which contains thirty-two parts in weight of oxygen, the same contains in equal volume forty-eight parts of ozone," any one who relies on this simple fact, and does not examine the physiology of the case, may say to the physician, "This must evidently be a very valuable means of introducing oxygen into the circulation, since, when an individual breathes, he has in a given quantity of atmosphere, breathed one-third more oxygen than in a normal atmosphere." This would be so far correct, if ozone resembled entirely oxygen in its external properties. Ozone is, however, an extremely labile body, which, in contact with the fluid tissues, immediately decomposes and gives off oxygen. This free oxygen is in a nascent state, which oxidizes very rapidly, and it acts when it is given off externally on the tissues just like diluted chlorine or any other oxidizing agent. When we, therefore, inhale ozone, it becomes completely decomposed in the mucous membrane of the mouth and in the trachea: it acts as an irritant, and it is observable that concentrated quantities of ozone give rise to the same phenomena of irritation. How can we, when we know certainly of such a substance that it is at the outset destroyed, assume that it has a therapeutic action? We have no means at present by which we can introduce ozone into the circulation, and, if we were to do so, the the same phenomena would result as when we introduce peroxide of hydrogen; oxygen would be given off, bladders full of oxygen would be formed which would produce suffocation. Blood, it may be said, ozonizes, and the blood contains ozone. Although, however, ozone may be developed from a substance, it is not correct to draw the conclusion that it is necessary for the existence of this substance. Wherever oxygen is required, we see a power of ozonizing. We find, therefore, that ozone is a product of decomposition; we find (and this is a known fact) that where decomposition occurs, ozone is present. In these few words Liebreich aims at putting forward especially the facts that we do not possess any knowledge as to the measurements of the proportions of ozone, and that, therefore, no therapeutic action can be assigned to it. He does not, therefore, further enter upon alleged results attained by the use of ozone.—*London Medical Record.*

Cystitis with Diabetes Insipidus.—N. R., æt. 27, came under my treatment on June 5, with the following history. Four years before, while at work cultivating corn, he had in his own language, "over-heated" himself, but had recovered from this to such an extent as to be able to pursue the business of stock buying. He was, however, unable to endure the sun's rays and continued in this state of health until one year ago when he became troubled with pain in the region of the bladder. At that time he resorted to a person who calls himself a physician, for treatment. Becoming worse he went to another representative of an irregular school with a like result. A third physician, who lives in Port Huron, was then tried and again the man found himself made worse as a consequence of the injudicious use of strong drugs. He then had recourse to kidney-wort, but failed to derive the slightest benefit from this panacea (?) for all urinary ailments.

At the time of consulting me the gentleman was suffering not only from his original trouble but from an excessive flow of urine produced by the action of the deleterious drugs administered by the so-called doctors. He was complaining of intense pain in the region of the bladder, which was aggravated by passing water and by motion. These pains were of a lancinating character and occasionally extended up the loins. His urine was also pale, watery and greatly in excess, amounting to one and a half gallons per day, and contained considerable albumen and a large quantity of pus. He had also at times passed blood. These facts awakened a suspicion of stone or a growth within the bladder, but an examination failing to reveal either of these the diagnosis was arrived at of cystitis with diabetes insipidus. The presence of the albumen was explained as being due to the cystitis and the polyuria had undoubtedly been caused by the abuse of diuretics.

The next day the patient was put upon a milk diet and the following prescription:

℞ Extracti eucalypti globuli fluidi, ʒ ij.
Extracti belladonnæ fluidi, ʒ ss.
Acidi benzoici, ʒ j.
Syrupi tolutani q. s. ad. ℥ vj.

M. Sig. A dessert spoonful in half a glass of milk every three hours.

The importance of rest in the horizontal position was enjoined and after one day the amount of medicine was reduced to a dose every night. This had an excellent effect. The pain diminished rapidly, and the drug each evening appeared to induce a good night's rest.

After one week the patient was ordered to discontinue the above prescription and given the following:

℞ Tincturæ ferri chloridi, ʒ iij.
Vini ergotæ, ʒ iij ss.

M. S. A teaspoonful after each meal.

The result did not justify the expectation. The preparation appeared to irritate the bladder and thus aggravate the trouble. For this reason it was discontinued and the patient given:

℞ Pulveris opii, grs. xij.
Camphoræ, grs. xxx,
Extracti belladonnæ, grs. iij.

M. Ft. Suppositoria viij. S. One at night on retiring.

This preparation worked like a charm. The relief brought caused the patient to feel like a new man and after taking it he felt so well that he engaged in rides around the country to look after his business. The jarring of the buggy seemed to have an unfavorable influence; for a rather copious flow of blood through the urethra followed. The history of the case with the fact that the blood came away in clots at the close of micturition led to the belief that the hemorrhage was of vesical origin. The following prescription was given:

℞ Acidi gallici, ʒ j.
Pulveris opii, grs. vj.

M. Ft. Suppositoria vj. S. One immediately and another on each recurrence of the hemorrhage.

As soon as the hemorrhage was controlled the patient was directed to use:

℞ Iodoformi ʒ ss.
Extracti belladonnæ, grs. v.

M. Ft. Suppositoria x. S. One at night.

In connection with the above he was given strychnia pills as a tonic and also the preparation of iron and ergot. The patient continued to improve, but the quantity of urine remained excessive. To correct this he was ordered to take:

℞ Extracti rhus aromaticæ fluidi,
Glycerinæ, ♏ ʒ j.
Aquæ puræ q. s. ad, ʒ jv.

M. S. A teaspoonful every four hours.

This preparation succeeded admirably. Under its action the quantity of water passed steadily diminished for about ten days when the amount had become about what was normal and the medicine was discontinued. I have known two other cases where an excess of urine disappeared under the action of Rhus aromatica, and these may fairly be instanced as evidence of the value of that drug in such complaints. The patient at this stage was feeling quite well when he was again attacked by vesical hæmaturia. This left behind considerable soreness and pain and the opium suppositories were resorted to for the purpose of their alleviation. However they did not seem to work as before and were accordingly discontinued. In their place recourse was had to the prescription first given and the results were in every respect satisfactory. The pain and soreness decreased and at date, September 11, have disappeared, with the exception of a slight irritation at times at the neck of the bladder. Thus, has this case been treated without a single washing out or injection of the inflamed organ, and is of value by showing how far two difficult affections to treat have disappeared as a result of internal medication. It is also of interest in indicating the necessity of a law prohibiting quackery, as this man was seriously injured and came very near losing his life by going through the hands of the three charlatans to whom he had previously resorted for treatment. It also shows the fact that an old quack is often as dangerous as a young one since in this case two of these pretenders who are known to the writer personally, had been in practice for almost a life-time, and had apparently not improved by experience.—*Dr. W. H. Smith, in Physician and Surgeon.*

Therapeutics of Strabismus.—M. Boucheron read a paper before the Academy of Medicine, in Paris, on the therapeutics of strabismus, in regard to the cure of the affection by mydriatics without operation. Basing his argument on the physiological fact that accommodation for short distances is governed by the convergence of the eyes, M. Boucheron proposes to combat the excessive convergence of hypermetropic eyes, and the consequent convergent strabismus, by temporarily suppressing accommodation through paralysis of the mechanism of accommodation with atropin. This plan of treatment was brought before the Academy of Sciences in March, 1879, and the results which have been obtained from it may be thus summed up. The *sine qua non* of success is the intermittent character of the strabismus, since this indicates that the internal recti have not yet undergone that retraction and shortening which is a consequence of their habitually vicious position. The instillation of sulphate of atropin (3 centigrams to 10 grams of distilled water) should be made on the first appearance of the squint, before there is any alteration in the convergent muscles. Atropin should be dropped into both eyes, to such an extent as is required to paralyse the mechanism of accomodation in each. One or two drops of the solution recommended above, dropped in morning and evening will be sufficient to produce the required effect. The atropin should be employed until the squint has disappeared when the child looks closely at anything. This treatment puts a hypermetropic squinting child into the same condition as one who is hypermetropic but does not squint. The length of time during which the atropin must be used, is, therefore, dependent upon the age of the child when the treatment was commenced, as well as upon the duration of the affection. The strabismus as a rule disappears in two or three weeks, but it exhibits a tendency to recur for several months. In the cases which have been observed the atropin causes no inconvenience, but if it is not well borne, it should be replaced by other mydriatics, as for example, duboisin. In some cases also, myotics, such as eserin, which render accommodation mechanism immovable by causing contraction of the ciliary muscle, may modify the relation which exists between accommodation and convergence to such an extent as to cause cessation of the strabismus. Mydriatics appear, however, to yield more certain results than do myotics. In nine cases of intermittent convergent strabismus occurring in children, in eight this method of treatment gave successful results.—(*Le Progrés Médical*, July 10, 1880.)